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PSYCHOANALYTICAL METHOD AND THE DOCTRINE OF FREUD

By

ROLAND DALBIEZ

DOCTEUR-ÈS-LETTRES; AGRÉGÉ DE PHILOSOPHIE

With an Introduction by

E. B. STRAUSS, M.A., M.D., Oxford, F.R.C.P.

*Physician for Psychological Medicine,
St. Bartholomew's Hospital.*

*Lecturer in Psychological Medicine,
St. Bartholomew's Hospital, Medical College
(London University).*

VOLUME II

DISCUSSION

Translated from the French

by

T. F. LINDSAY

LONGMANS, GREEN AND CO.

LONDON ✧ NEW YORK ✧ TORONTO

LONGMANS, GREEN AND CO. LTD.
OF PATERNOSTER ROW

43 ALBERT DRIVE, S.W.19
17 CHITTARANJAN AVENUE, CALCUTTA
NICOL ROAD, BOMBAY
36A MOUNT ROAD, MADRAS

LONGMANS, GREEN AND CO.

55 FIFTH AVENUE, NEW YORK
221 EAST 20TH STREET, CHICAGO

LONGMANS, GREEN AND CO.

215 VICTORIA STREET, TORONTO

First published 1941

CODE NUMBER: 97127

PRINTED IN GREAT BRITAIN
BY WESTERN PRINTING SERVICES LTD., BRISTOL

INTRODUCTION TO VOL. II

Our first volume was devoted to the "setting forth" of psycho-analysis; in the second, we shall undertake its criticism.

Many thinkers regard psycho-analysis simply as a philosophy, and so claim the right to discuss it purely dialectically, without the least reference to experience. It is strange indeed to find physicians, whose professional training should guard them against so serious a mistake in method, publishing critical works on psycho-analysis which contain not a single personally observed case-history, nor any hint of the need for experimental corroboration. Although our own starting-point was philosophical, we soon realized that philosophy alone was insufficient to solve the new problems raised by psycho-analysis, and that Freud's experiments had to be repeated before his assertions could be criticized. We have spent several years in seeking to ascertain how far his theories were borne out by facts. In another direction, our attempts have been directed towards using philosophical criteria to sift his strictly theoretical concepts, in the belief that whereas all human knowledge must begin with experience, nothing final is achieved by experience alone. Our double task of observation and reflection has gradually developed in us the conviction that there are grounds for distinguishing a methodology, a psychology, and a philosophy in psycho-analysis.

Having defined the spirit of the present volume, we have still to explain its arrangement.

The first two chapters are devoted to preliminaries. Chapter I, entitled "The Unconscious," has a clearly philosophical orientation, because the principal difficulties raised against the concept of unconsciousness are not in fact scientific, but rooted in a particular metaphysical attitude which refuses to acknowledge the independence of being in relation to consciousness. In an analysis which we regard as final, Meyerson has shown that every science of physical being is based on the assertion of that physical being's independence of consciousness. We believe we must go further and acknowledge likewise that no science of the psyche can be established without premising that that psyche is to a certain extent independent of consciousness. If the psychic unconscious does not exist, there is no science of psychology; there is no more than a science of physiological conditions of psychic events, and an unscientific *totum* of

introspective descriptions. In defending the reality of the unconscious psychism, not only psycho-analysis, but psychology itself is fighting for its life. We have thought the appeal to philosophy necessary in order to justify their right to existence.

In complete contrast with its predecessor, Chapter II, entitled "Psychic Dynamism," is primarily physiological. It seemed to us that no firmer basis could be found for the much disputed concept of psychic dynamism than Pavlov's experiments in conditioned reflexes. There is a remarkable convergence between the conclusions of the Russian physiologist and those of the Austrian psychologist.

After these philosophical and physiological preliminaries, we tackle the very essence of our subject in Chapter III, entitled "The Methods of Exploring the Unconscious." In our view, this is the most important chapter of all. We may say that it is for this alone that our two volumes have been written. The therapeutic results of psycho-analysis, or Freud's theories of sexuality, are of completely secondary importance. The essential part of Freud's work has been the creation of an entirely new method of exploring the unconscious. Like almost all great innovators, Freud has presented his discovery in a form which is logically very imperfect. We have undertaken the task of correcting this defect, and of demonstrating that the instrument of psycho-analytical investigation could be used impartially and give clearly defined results.

After methodology comes the study of psycho-analytical psychology, to which we have devoted two chapters. The title of Chapter IV, "Examination of Freudian Sexology," is a clear enough indication of its scope. We have sought neither to justify nor to refute Freud's sexual theories, but to examine them. In spite of a defective formulation of concepts and a strange terminology, Freud's sexology seems to us to contain valuable and well-grounded contributions to science.

Chapter V is entitled "Morbid Psychic Causality." We had originally intended to make this chapter a detailed study of the various neuroses and psychoses, but later considered that a work of this kind was the concern of psychiatry proper rather than of pathological psychology. Rejecting our former intention, therefore, we have given the chapter a specifically psycho-pathological bearing.

Chapter VI, the last, is entitled "Psycho-analysis and the Life of the Spirit." We should have preferred not to have had to write it. But since Freud has not kept himself within scientific boundaries, but has invaded, psycho-analytical sword in hand, the realms of philosophy, we owed it to ourselves to follow him thither.

Our intention, throughout both volumes, has been to work

neither for nor against psycho-analysis. We should be glad if we had achieved some contribution to the progress of psychology, and more particularly to psychological methodology, by successfully distilling from the psycho-analytical effects of to-day the results which will remain part of the science of to-morrow.

R. DALBIEZ.

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CHAPTER I

THE UNCONSCIOUS

The concept of psychological unconsciousness is of primary importance in Freud's system. Our preceding exposition has made it abundantly plain that if it is rejected, the whole edifice of psychoanalysis falls to the ground. This concept is fairly generally accepted by modern psychologists, and it is rare to find writers who formally identify "the psychic" with consciousness. But whereas unconsciousness is generally accepted, its concept none the less remains very obscure to most thinkers. We shall attempt to clarify it in order to be able to pass judgment on the Freudian theory of the unconscious. To this end, the four sections of this chapter will be successively devoted to the study of (i) the metaphysics of the unconscious, (ii) the various types of consciousness, (iii) the various types of unconsciousness, (iv) the Freudian unconscious.

I. The Metaphysics of the Unconscious

The word "consciousness" is used in two different senses. In the wide sense, it means the psychic activity. In the exact sense, it implies the knowledge which the psychic activity has of itself. This double meaning leads to much confusion in discussions of the unconscious. A superficial inquiry might lead us to suppose that the dispute was simply terminological, a battle of words. But a closer study of the controversies on the unconscious shows us that the disagreement rests in ultimate metaphysical conceptions, in the relations between being and knowledge.

The primary meaning of the word "consciousness" is the narrow meaning, knowledge of self. Later this meaning became extended to include the whole psychic activity. The reason for this extension is to be found in the supposed discovery that there was no real difference between the psychic activity and its knowledge of itself. The *esse* thus seemed to be identifiable with the *cognosci*, at least so far as the psychism was concerned.

The reduction of being to knowledge is the very definition of idealism. The statement that the reality of our psychic activity is in no way different from the knowledge we have of it is therefore

the profession of a partial idealism. We say a "partial" idealism, for many of those who identify the psychism with consciousness refuse to subscribe to the radical idealism whose motto is Schopenhauer's famous phrase, "The universe is my representation." They admit the existence of a material world distinct from the knowledge we possess of it. They hold that the absolute identity of subject and object, of the act of knowledge and of its content, is not a law, but a special instance. It is clear that the supporters of complete idealism, who believe that the *esse* is always and everywhere identical with the *cognosci*, will not allow the psychism as an exception to their principle. In their view, the concept of the psychological unconscious is condemned in advance.

What are we to think of the complete identification of being and knowledge? We hold it to be unacceptable. Idealism is constantly appealing to the evidence of consciousness. Now, if introspection provides us with any datum at all, it is surely that of the irreducible dualism of subject and object. We may challenge idealism to quote a single demonstrative instance in which this dualism has entirely disappeared. This argument from introspection may be reinforced by a *reductio ad absurdum*. If the absolute identity of being and knowledge is asserted, error at once becomes impossible. To be at variance with its object, knowledge must, it is clear, be distinct from it. If it is identical with it in the strictest sense of the word (as pure idealists must maintain), it cannot at the same time be at variance with it, without violating the principle of contradiction. But if we deny the existence of error (or its possibility), we fall into an indirect contradiction, for we implicitly admit that the opposite statement, asserting the existence of error (or its possibility), is false. To deny the existence of error is contradictory, for it involves the statement: the affirmation of the existence of error is an error. We must therefore abandon the idealistic identification of being and knowledge. Idealism, indeed, will return to the charge by challenging the definition of truth by the conformity between knowledge and its object, replacing it by a definition which makes the normality of knowledge the characteristic of the true. This insistence is quite ineffective, for normality cannot be anything but conformity to a norm. We have then a choice between two hypotheses. Either this norm is identical with the act of knowledge, so that error again becomes impossible; or the act of knowledge is not identical with its norm, and we return to realism. The idealist will substitute another, more interiorized, definition of truth for that by the normality of knowledge. He will recall that, strictly speaking, truth exists only in the judgment. Thence he will conclude that truth consists in the consonance of the

predicate with the subject, with no reference to an external object or even to a norm distinct from knowledge. Here again the idealist's retort is ineffective. Is this consonance of the predicate with the subject distinct from the person's belief in the existence of the consonance, or is it not? If it is not, then every proposition is true simply because it is believed, and thus error becomes impossible. But if it is so distinct, realism is again triumphant. In short, idealism implies the negation of error; but this negation is contradictory; therefore idealism is contradictory.

The preceding argument may be set out in various different ways. We may take the case of negation instead of that of error. If there is no distinction between the content and the act of thought, we must maintain that thought of negation is negation of thought; we must deny the existence of negative ideas. But to deny the existence of negative ideas is clearly contradictory. It is highly instructive, in this connection, to study the embarrassment of philosophers steeped in idealistic illusions when confronted with the problem of negation. It will be enough to quote the three examples of Kant, Hamelin, and Bergson, although to attempt to study them here would be beyond the scope of a work on psycho-analysis.

In criticizing idealism, we may supplement the *reductio ad absurdum* arising from the study of error or negation by an argument drawn from the general orientation of scientific thought. "Science requires the concept of thing."¹ The universe studied by the scientist is prior to human knowledge and independent of it. Astronomy becomes impossible if we refuse to admit that "the mathematical laws of the movement of stars have been governing that movement since the existence of the world, and long before Kepler's demonstration of them."² Geology becomes impossible if we deny that for millions of years there was no thinking, or even sentient, being alive on our globe. "The whole of science," writes Meyerson, "rests on the basis—doubtless not very evident (if we may judge from the attempts made to deny its existence), but none the less deep and firm—of belief that being is independent of consciousness."³

We ourselves consider the proof drawn from the requirements of scientific thought as having primarily an *ad hominem* value. The true critique of idealism is derived from metaphysics. To our great regret, we must be content with the bare outline of discussion we have just sketched in.

The case for the psychological unconscious is not proved once radical idealism has been dismissed. Many philosophers who

¹ Meyerson, *De l'explication dans les sciences*, pp. 3-33.

² Ampère, quoted in Meyerson, *op. cit.*, p. 7. ³ Meyerson, *op. cit.*, p. 31.

recognize the existence of a material world and of a physical unconscious, will not hear of a psychic unconscious. They hold that unconsciousness is a synonym for mere material existence, and that only minerals and vegetables are unconscious. Knowledge is always *self-knowledge*. We have now to inquire whether this qualified idealism is tenable.

There is a knowledge of the non-ego. All knowledge is self-knowledge. These are the two propositions which the system we have called qualified idealism claims to be able to reconcile. Since it asserts the existence of the external world, it must therefore recognize a knowledge which has material reality for its object. There is a knowledge of the non-ego. But since partial idealism refuses to recognize the psychic unconscious, it must maintain that the act of knowledge of the non-ego is at the same time an act of self-knowledge, that it apprehends itself in apprehending material reality. All knowledge is self-knowledge.

This theory is clearly a compromise between realism and idealism, a position which we do not think it possible to maintain. The act of knowledge takes its unity from that of its object. It is quite true that one may see the various parts of a material whole simultaneously, or apprehend by a single act the difference between two concepts. But these examples, and others of the same kind which we might quote, so far from weakening our thesis, serve only to support it. The multiplicity in such instances is not a pure multiplicity, but a *unified* multiplicity. Strict disparity between objects necessarily involves plurality of the acts whereby they are known. Now qualified idealism asserts that the external world is distinct from the cognizant subject. It recognizes that the visual sensation of a tree is not a property or a modification of the tree, but of the man looking at it. It is then impossible to say that the sensation apprehends the tree and apprehends itself. There must be a distinction between the sensation and the knowledge of the sensation. In itself, the external sensation is not conscious; it can only become so by means of a supplementary act. *Mutatis mutandis*, the same reasoning is applicable to intellection.¹

We have just seen that the realist's assertion of the existence of the external world entails as its consequence the *intrinsic* unconsciousness of the sensation and intellection of material objects. The counter-verification is easy. The writers who maintain that external sensation is essentially conscious, are necessarily led to throw doubt on the directness of apprehension of the external world. Thereafter

¹ Judgment raises special difficulties which will be examined later. (D.)

they can only escape the idealistic negation of things by means of illogicality.

Can we recognize the existence of immediate perception of external objects? [asks the author of a text-book on psychology long considered classical in France]. This theory is a contradiction in terms: "immediate perception" means in fact "consciousness"; for if a perception is not a conscious event, it is unknown to us; it is as if it did not exist; it does not exist. Therefore perception and consciousness are identical. Now "consciousness" means "knowledge of what is within us." It is therefore contradictory to claim to apprehend any external object by perception.¹

Having thus dismissed both radical and qualified idealism, we must fall back on realism. The realist philosopher holds that man begins with the knowledge of a material object distinct from the cognitive operation whereby it is apprehended. This applies to both internal and external sensations. It must however be noted, as we shall explain in detail in the course of this chapter, that *ordinary* internal sensations cannot be called unconscious in the strict sense. It is none the less true that the movements of our limbs are distinct from the cœnesthetic sensations which inform us of them, just as blue is distinct from the sight of blue. When intellection succeeds sensation, the dualism of subject and object persists, i.e. the being in distinct from our concept of it.

Since external sensation and intellection are in themselves unconscious, they can only become conscious by a second act. At the first stage, we see a colour; at the second stage, we become conscious of our vision of it. Similarly, by a first act we conceive the colour; then by a second act we become conscious of the conception. The fact that consciousness is posterior to knowledge has been excellently demonstrated by the American neo-realists.² Why should it be necessary for the direct act of sensation or intellection to be followed by conscious apprehension of the sensation or intellection? Clearly it is unnecessary. It is perfectly conceivable that sensation or intellection may take place in us and remain unconscious. Later we shall inquire whether this possibility is in fact realized.

Here an objection may be raised. If an act only becomes conscious through apprehension by a second act, this second act will only become conscious through apprehension by a third act, and so on *ad infinitum*. This objection is a *petitio principii*, for it is only valid if we grant that all that takes place within us must become known to us, i.e. conscious. A realist, we must repeat, has no need

¹ Rabier, *Psychologie*, pp. 408-9.

² Cf. Kremer, *American Neo-realism*, pp. 52-3.

to grant such a premise. External sensation is apprehended by a second act which we shall call "consciousness of external sensation," or "sensory consciousness." But that is the end; this second act is not apprehended by a third, and it may therefore be described as unconscious, in a relative sense. The case of intelligence is different. The first act may be apprehended by a second, the second by a third, and so on. I can think of an object, think that I am thinking of an object, think that I think that I am thinking of an object, etc. I shall always stop at some point, but, unlike the previous case, that point is not determined. The capacity for infinite reflection on its own operation is the privilege of the intelligence—although of course that infinity is potential and not actual.

The mind's indefinite power of self-reflection may be used as an argument against the idealistic identification of subject and object, which involves that of knowledge and consciousness. If the dualism of subject and object, which implies that consciousness is posterior to knowledge, were not the fundamental law of the mind, if thought could apprehend itself by a process of sheer identity in a single act, instead of first apprehending a material reality distinct from itself unconsciously, all true reflection would be impossible. The hypothesis of strict idealism would make criticism of our own beliefs, systematic doubt, and the revision of our opinions inconceivable. The dualism exists primarily or not at all. We are therefore right to premise that sensory knowledge and intellectual consciousness end (each in its own tempo but both of necessity) in an ultimate act which, apprehending the previous act, but not apprehending itself nor being apprehended by any successor, may be called unconscious in a relative sense. The instance of relative unconsciousness is the only one whose existence may be dialectically demonstrated. It is of no interest except to the philosopher. Unconsciousness of the ultimate act is in fact highly relative; it is not known, but it knows its predecessor from the very fact that that predecessor derives from the self. The psychologist wastes little time over these niceties; he prefers to inquire whether the direct sensory or intellectual cognitions, which we have seen to be *capable* of remaining unconscious, do in fact do so or not.

Realism implies not only the distinction between the cognitive operation and its conscious apprehension, but the further distinction between the conscious apprehension and the psychic existence. If I can think without knowing that I am thinking, it is clear that I can exist without knowing that I am existing. Unconsciousness is not inexistence. The confusion between that which conditions psychic existence and that which conditions merely its conscious apprehen-

sion of itself, has been propagated mainly by Cartesianism. "It is certain that I am, that I exist," writes Descartes in his second Meditation, "but for how long? For as long as I think, for it might be that if I wholly ceased to think, I should at the same time wholly cease to be." One could, if pressed, give this statement an acceptable meaning, but it risks transmitting the confusion between the conditions of existence and the conditions of self-knowledge.

We must go further. In the ambiguous passage quoted, Descartes has enclosed two problems in one: "Can one exist without thinking?" and "Can one exist without *self*-thinking?" Descartes, who identifies—or who tends at least to identify—cognitive operation with the consciousness of it, does not of course distinguish between the problem of the possibility of psychic existence without activity, and that of the possibility of psychic existence without consciousness. But a realist must separate the two questions. We learnt from the foregoing discussion that the mind can exist without performing the special function known as conscious apprehension. But can it exist without performing any psychic function?

A comparison of our psychic operations with our existence shows us that whereas our acts appear and disappear, our existence remains. There is therefore a distinction between existence and action. Moreover we observe that whereas consciousness of existence depends upon consciousness of operation, the opposite is true in the realm of reality, i.e. operation depends upon existence. Our knowledge goes from effects to causes; reality moves from causes to effects. If the effect depends upon the cause, we clearly cannot maintain the opposite—that the cause depends upon the effect. Since existence is distinct from operation and is its cause, it must also be independent of it. The cessation of operation does not imply the annihilation of being. Theoretically, one may exist without acting.

This realist thesis is clearly opposed to the two most generally accepted conceptions of the unconscious—the physiological theory, and the theory of the plurality of centres of consciousness. We must now define our position towards them.

The physiological theory was very clearly stated some time ago by Ribot in the introduction to his classic *Les Maladies de la personnalité*. Ribot begins by admitting the idealist premise identifying "the psychic" with the conscious. This obviously settles the fate of the psychic unconscious, of which there can be no further question. Ribot replaces it by a purely physiological unconscious. He disclaims radical epiphenomenalism, but it must be recognized that he comes strangely close to it.¹ His theory lays the emphasis on

¹ Ribot, M. P., pp. 14–19.

"nervous" events, psychic events (which he identifies with conscious events) being superimposed.

The construction of Ribot's system is open to objections which seem to us final. In the first place, it inextricably confuses idealism and materialism. Once one has admitted that knowledge is *self-knowledge*, what right has one to speak of a material world? We have shown above that the idealistic confusion between knowledge and consciousness renders hopeless any attempt to justify the existence of the external world. Descartes avoided this difficulty by appealing to God's veracity. Obviously Ribot cannot have recourse to an artifice of this kind, so that he finds himself in a rather contradictory position. He begins with a premise which leads straight to idealism, and later makes a materialist act of faith. I say "act of faith," for he is unable to explain what valid knowledge he possesses of the "nervous" events he regards as essential. The only way out of this maze is the path that leads back to realism. Once the realist principle is admitted, all is clear. External sensation is an organic-psychic operation, unconscious *per se*, which directly apprehends an actual material reality. This theory begins by setting the existence of the material world beyond doubt. But at the same time (and this is the important point) materialism stands condemned. Sensation is not reducible to its organic conditions; since it is a cognition, we may say that sensation is essentially psychic. The physiologist can only grasp its inferior aspect. Sensation belongs by right to the psychologist. But although external sensation is a cognition, it is intrinsically unconscious. Having justified the material world, the realist proceeds to justify the psychic unconscious. Let us add that realism can restore to favour the expression "epiphenomenal consciousness," by investing it with a new meaning. In the materialist view, consciousness (in its general sense of psychic activity) is a mere epiphenomenon of the organic order. In the realist view, consciousness (in the exact sense of knowledge of self) is a concomitant of the psychic activity, without thereby losing its efficacy.

This argument from the self-contradictions of Ribot's theory may be reinforced by another. Ribot maintains the existence of a *purely* physiological unconscious, with a *strictly causal* action upon conscious psychic events. We cannot accept this statement, which in fact claims that the effect is superior to the cause, and thus breaks the principle of causality. Ribot is well aware of the difficulty, which he has tried to obviate by a distinction between the question of origin and the question of value, and by stressing the fact that throughout the universe, the higher is conditioned by the lower.¹

¹ Ribot, M. P., pp. 14-15.

Ribot's explanations are wholly unsatisfactory. It is true to say that in this world the higher is generally conditioned by the lower. But the nature of that conditioning must be made clear. Is it a case of material or of efficient causality? It is at this wholly metaphysical distinction between these two types of causality that the debate between materialists and realists must end. We realists cannot admit that a psychic event is *produced* (in the strict sense of the word) by a *solely* material cause.

The theory of the plurality of centres of consciousness also begins by admitting, according to the classical premise of idealism, that psychic activity may be reduced to consciousness. It follows that there can be no such thing as the psychic unconscious. A substitute must however be found for it, as soon as it is recognized that the content of our consciousness is influenced by something distinct from it which is not conscious *to us*. This reality, unknown to us in any direct manner, has an efficient causal role with reference to our psychism, and must itself be psychic. We are thus led to postulate one or more secondary consciousnesses.¹ This solution has the advantage of avoiding the paradox of representing psychic effects as produced by exclusively organic causes. But its idealistic starting-point makes the existence of a plurality of consciousnesses almost as difficult to maintain as that of the external world. It is a classic argument that idealism leads logically to solipsism. The consistent idealist

should assert that his consciousness is the only consciousness, and that the only aim of knowledge is to arrange its representations in a harmonious order for his isolated ego. The slightest deviation from this point of view leads, and must inevitably lead, to a realist attitude towards the problem of knowledge.²

This argument is very hampering for the idealist who wishes to assert the existence of other men, and scarcely less so for the psychologist who supports the theory of a number of centres of consciousness. Indeed, either the plurality is regarded as fundamental and irreducible, which raises exactly the same difficulty as is raised by the existence of other men; or else the plurality is only apparent, and conceals a fundamental unity, which leads to the rejection of the basic premise of idealism, i.e. that being and seeming are completely identical. One might try to admit a plurality of centres of consciousness from the realist standpoint, but once the realist principle

¹ Cf. Binet, A. P., pp. 204-18.

² Cresson, in *Bulletin de la Société française de philosophie*, twenty-first year, Nos. 3 and 4, p. 51. Discussion of M. Brunschvicg's contribution: "Is the intellect capable of comprehension?"

is accepted, the need to identify the psychic with the conscious disappears, and it is much more simple and logical to assert the existence of an unconscious proper.

Our comparison between the realist system and the two systems usually opposed to it confirms the solidarity of the psychic unconscious with realism; the one concept may be said to imply the other. This being so, a new problem arises. How far can the unconscious be dissociated from the conscious? Can true division of personality take place? The psychologists of the end of the nineteenth century unreservedly asserted the possibility of true division of the ego. Their successors of the twentieth century are, as a general rule, much more cautious. Nevertheless, the question of the limits of the emancipation of the unconscious from the conscious remains still to be answered. What solution has the metaphysics of realism to offer?

In the normal state, the two activities work harmoniously together. The deep levels of our psychism nourish our conscious operations with their life-giving sap. We are continually reaping the benefit of our former psychic acquisitions, without the necessity of evoking them in consciousness. A classic example of this is to be found in the unconscious nature of habit, and in spite of the weight of Bergson's opinion, it is certain that habit extends to the whole psychism. It cannot be confined, as the author of *Matter and Memory* tends to confine it, to the field of the organic. From the depths of the unconscious our cognitive and affective habits influence all our acts.

The collaboration of the unconscious with the conscious in artistic and scientific inspiration sometimes exhibits such passivity and lack of voluntary control that one might be tempted to speak of dissociation. Some agreed meaning must be found for the word "dissociation." It would be absurd to limit it to a strictly pathological acceptance. Genius is not a psychosis, or even a neurosis. The most elementary common sense forbids us to set the hallucinations of a schizophrenic on the same plane as the sudden flashes of illumination of a Goethe or a Poincaré. The schizophrenic's hallucinations are *dereistic* products; they have no value in truth or beauty. The works of Goethe have enriched mankind's heritage of art, and Poincaré's mathematical discoveries belong to that cloudless region of pure science in which truth, as soon as its light is visible, has the power of commanding the final and unanimous assent of men's minds. It is none the less true that *Werther* was written in an almost somnambulistic state,¹ and that it was in a tram car,

¹ Goethe's *Werke*, herausgegeben von H. Düntzer, 19 Teil, *Wahrheit und Dichtung*, 3 Teil, p. 19.

without apparently the least preparation from his previous thoughts on the subject, that the idea came to Henri Poincaré that the transformations he had used to define the Fuchsian functions were the same as that of non-Euclidean geometry.¹ Such instances of inspiration are generally explained by an unconscious incubation ending in the eruption into the field of consciousness of the product developed outside it. It may be objected to this interpretation that there is nothing to prove the existence of an unconscious development chronologically distinct from the eruption into the field of consciousness. Instead of supposing, for instance, that a problem *is found solved* on awaking, we might equally well admit that it *is solved* at that moment. It is not legitimate to deduce unconsciousness from suddenness. We cannot describe the process whereby the idea emerges as unconscious, otherwise, as Rivers so rightly observes, we should be "speaking of a change set up in consciousness unconsciously."² This objection seems to me most interesting. It would certainly be contradictory to claim to apprehend something unconscious by consciousness. But unless it is maintained that the impression of passivity is wholly erroneous, there are no grounds for rejecting the immediate inference whereby the artist or the scientist refers to his unconscious the idea which arises in him, and to the appearance of which he is not conscious of having contributed. The case of invention is less telling in favour of the existence of unconscious development than that of hallucination. Let us take, for example, a symbolic visual hallucination. It appears ready made in the field of consciousness, which is usually ignorant of the relations between symbol and symbolized. Here it is impossible to deny that the "hallucination-work," to imitate one of Freud's expressions, has taken place wholly in the unconscious. In the same way the "dream-work" is wholly unconscious. Once the question of value is dismissed, it does seem that discovery is often comparable, as far as the unconsciousness of its development is concerned, to hallucinations or dreams.

In the neuroses, the independence of the unconscious with reference to the conscious is so strongly marked as almost to become antagonism. The invasion of the field of consciousness by obsessive images is not only involuntary but uncontrollable. Self-criticism may remain intact, but self-government wavers, and the train of thought is manifestly disordered. The analysis of obsessions shows that the person is generally unaware of the relation between his symptom and its cause; to recur to our usual terminology, there is

¹ Poincaré, *Science and Method*, trans. Francis Maitland, Nelson, 1914, p. 53.

² Rivers, *Instinct and the Unconscious*, p. 16.

"unconsciousness of relations." The work of elaboration in an obsession (and the same could be said of the other neuroses) has taken place unconsciously. But in the neuroses, unconsciousness of causes often accompanies unconsciousness of relations. Analysis brings to light memories completely forgotten for many years, inaccessible to voluntary recall, whose role in the ætiology of the symptoms is manifest. This time we are dealing with true unconscious elements. There is, indeed, no scientific reason to suppose that these elements are grasped by a secondary consciousness. To reach this conclusion, one must have recourse to the metaphysics of idealism, of which we have already given our opinion.

The normal psychism, artistic or scientific inspiration, and the neuroses raise no very serious philosophical difficulties. This is not true of the phenomena known as "disorders of the personality." But before examining the interpretation these must be given from the realist point of view, we must shortly discuss the highly controversial problem of their authenticity.

The psychologists of the end of the nineteenth century studied "disorders of the personality" almost exclusively in hysterical patients, at least as far as spontaneous disorders are concerned. As for induced disorders, hypnosis seemed to furnish the means of causing them to appear and disappear *cito, tuto et jucunde*. The results they seemed to have achieved are summarized in the works of Ribot and Binet.

Matters took on a different complexion after Babinski's revision of hysteria. The "multiple personalities" which had until then been regarded as spontaneous were dismissed as "artificially produced phenomena." Certain physicians actually came to "deny the very existence of hysterical symptoms other than those artificially induced by medical examination, or even to identify hysteria with malingering."¹ Hypnotism fell into the most complete discredit, as we find in Dupré's famous sentence: "Hypnotizer and hypnotized form an inseparable morbid couple, of which the most interesting subject for the alienist is not the hypnotized."²

The scepticism of French physicians, who regarded hysteria and hypnotism merely as mythomania or even as malingering, was not shared by foreign scientists. Outside France, work was still being devoted to the problems in which we took no further interest. Pavlov, in the course of his minute investigation of conditioned reflexes, was confronted with the enigma of sleep—the "physiologists' cross," as Myers described it. The dogs whose salivary reflexes he was

¹ von Monakow and Mourgue, I. B. N., p. 248.

² Quoted in Georges Dumas, T. P., vol. ii, p. 942 (note 1).

examining used to go to sleep on the bench. Pavlov decided to make this obstacle the aim of his researches.¹ He already possessed the important concept of internal inhibition. After testing several theories, he came to the conclusion that ordinary sleep was an internal inhibition generalized over the whole cerebral cortex and diffused as far as the mesencephalon. But a number of intermediate states of partial sleep lay between the sleeping and the waking state. Their symptomatology compelled Pavlov to identify them with hypnosis in man.² And further, the causes responsible for these states were the processes traditionally used by hypnotists, especially the monotonous repetition of weak stimuli.³ On the basis of internal inhibition Pavlov has erected a vast construction which enables him not only to explain, on a single theory, both sleep and analogous states, but even to reproduce them experimentally at will in the dogs in his laboratories, according to a strict determinism. Hypnosis thus seems to be an indispensable link between purely local internal inhibition and the generalized inhibition of sleep. It is clear that Pavlov's work has resurrected the authenticity of hypnotic states and restored it to its old position. To deny it, we should have to reject all our most well-authenticated data on the physiology of sleep. It is to be supposed that the opponents of hypnosis will be chary of calling Pavlov's dogs mythomaniacs or malingerers.

The rehabilitation of hypnosis leads us logically to undertake that of hysteria. Epidemic encephalitis has aroused in the minds of certain neurologists doubts as to the security of the structure raised by Babinski. Some go so far as to speak of the necessity to revise pithiatism. In these conditions, it seems to us impossible to reject "disorders of the personality" without examination, as was the fashion ten years ago, on the pretext that they had been observed in hysterical patients. We do not propose to offer a revaluation of the old case-histories of Azam or of Morton Prince. It is quite possible that they may have been misobserved and misinterpreted. But in our opinion, the observation of events of this kind must be undertaken anew. Here we have primarily to investigate the metaphysical question: supposing that "disorders of the personality" exist, what is the realist interpretation of them?

The case with which we shall start our investigation is that of "alternating personalities." This term may bear three different meanings according as it envisages disorders of (i) psychic behaviour, (ii) consciousness, or (iii) the metaphysical unity of the individual.

¹ Pavlov, L. C. R., pp. 305-18; Pavlov, C. R., pp. 234-83; Lhermitte, S., pp. 234-83.

² Pavlov, C. R., pp. 265-83.

³ Pavlov, C. R., pp. 404-11.

Ambulatory epileptic automatism affords a typical example of "alternating personality" in sense number (i). The behaviour of the epileptic during his fugue may be in marked opposition to his usual habits. Spontaneous somnambulism exhibits somewhat similar features.¹ Induced somnambulism, especially in spiritualistic mediums, is overwhelmingly rich in phenomena as complex as they are widely debated. Dismissing the great army of frauds, there is no doubt that sincere mediums are to be found. The realism with which the latter sometimes play the part of the personages who are supposed to be temporarily incarnated in them, is quite astonishing. Flournoy's famous work *Des Indes à la Planète Mars* is a standard monographical study of a highly-gifted medium.

Meaning number (ii) confronts us with the more delicate problem of alternating consciousnesses. It is very difficult to know what takes place during epileptic fugues. We might conceivably suppose that the psychic activity of certain persons in the secondary state operates without any self-consciousness, but it seems very unlikely. It seems more reasonable to admit that the patient not only thinks, but is conscious of thinking. Similar characteristics may be discerned in spontaneous somnambulism. But induced somnambulism, especially in spiritualistic mediums, would probably have to be dismissed as pretence pure and simple, were we to refuse to admit that it implies a secondary consciousness. "Trance-personalities" use the word "I," and speak of themselves in a truly intelligent manner. This can no longer be doubted by those who read the aforementioned work by Flournoy, or William James' report on Mrs. Piper.²

"Alternating personalities" in meaning number (i) (alternating behaviour) and in meaning number (ii) (alternating consciousnesses) raise no real philosophical difficulty. The problem does not become serious until we reach meaning number (iii): can the metaphysical unity of the individual really be broken? A scientific investigation of this problem will clearly show that there is not the least reason for supposing such a break.

The examination of "alternating personalities" in meanings numbers (i) and (ii) shows that the differences between them are on the whole superficial. Flournoy has proved, in an excellent analysis, that Helen Smith's "trance-personalities" were merely the dramatization of certain features of the medium's character which were more or less repressed in the waking state. His chapter on Leopold's personality is a masterpiece of psychological dissection.³ The re-

¹ Cf. Lhermitte, S., pp. 151-2.

² William James, *Collected Essays and Reviews*, Longmans, 1920, pp. 438-41, 484-90.

³ Flournoy, *Des Indes à la Planète Mars*, pp. 75-135.

searches of William James and of Mrs. Sidgwick into the case of Mrs. Piper reach the same conclusion. A minute examination of the forms of association, of memory, and of peculiarities of language, leads them to regard the various "trance-personalities" as no more than successive disguises of the deep levels of the medium's psyche.¹ Furthermore, the so-called separate personalities may ultimately coalesce. Many early cases of "alternating personality" have been cured in this manner. If the case of Miss Beauchamp is felt to have been worked to death, that of the Rev. Hanna seems to offer itself in better circumstances. A "secondary personality" made its appearance after a carriage accident; active treatment gradually led to the fusion of the two memory-systems in a single consciousness.² It is abundantly clear that in facts of this kind there can be no question of a break in the metaphysical unity of the individual. But if we now examine the question from the philosophical point of view, we shall say not only that the ontological split of the ego does not take place, but that it cannot take place. Oesterreich has shown very clearly that division of the human being is impossible.³ However we may regard the concept of "splitting of the ego," we cannot find a meaning for it. The idea of division is only applicable in the field of quantity, and to that which depends intrinsically upon matter for its existence. To apply the concept of fragmentation to the mind is to misconceive its very essence.

After "alternating personalities" we must examine "co-existing" or "simultaneous personalities." Here again we shall distinguish three instances, according as we mean to envisage "simultaneous psychic behaviours," "simultaneous consciousnesses" or a duplication of the metaphysical unity leading to the co-existence of two ontological persons in the same body.

As an example of meaning number (i), automatic writing used often to be quoted, when it achieved an intelligible result and strictly co-existed with conversation in which the subject showed equal signs of intelligence. Descriptions of events of this kind are to be found in the early works of Janet and Binet. Modern psychiatry regards them with extreme suspicion, to say the least. In particular, it seems impossible to evidence *absolute* simultaneity of intelligent speaking and writing. But unless such absolute simultaneity can be verified, the very idea of "co-existing personalities" disappears, and

¹ Sidgwick, "A Contribution to the Study of the Psychology of Mrs. Piper's trance-phenomena," in *Proceedings of the Society for Psychological Research*, part 71, vol. xxviii, pp. 315-31.

² Jastrow, *The Subconscious* (Constable, 1906), pp. 394-403.

³ Oesterreich, *Possession (Demoniacal and other)*, Kegan Paul, 1930. Trans. D. Ibberson, pp. 51-5.

we are simply left with very rapidly alternating "personalities." Mignard, who has published a very interesting criticism of the early theories of dissociation of the personality, ends with this interpretation: "Slight oscillations of the attention will allow of the apparently simultaneous expression of two distinct roles, the one expressed in words, the other in writing or automatic writing."¹ From the metaphysical point of view, it is very difficult to accept the theory that two disparate judgments can be thought at the same time by the same mind. If however a judgment and some activity of the imagination, lacking true intellectuality, were concerned, philosophy would have no objection to make to the hypothesis of two simultaneous psychic dispositions. But here again it seems just as easy to interpret the facts quoted on the hypothesis of rapid alternation.

If the existence of simultaneous psychic dispositions is not established, what are we to say of that of "simultaneous consciousnesses"? As Mignard very rightly observes, the argument some writers have considered themselves entitled to draw from the statements of certain delusional patients, has not the least value.² "In language which seems paradoxical," writes Minkowski, "but which fundamentally is not paradoxical at all, we may say that if the psychism of patients with ideas of reference were split up, they could never be aware of it or discuss it."³ This is evidently so, and Minkowski is here merely reproducing Stuart Mill's famous objection to his own system: a series cannot apprehend itself as a series. The only method, therefore, of proving the existence of two simultaneous consciousnesses seems to be to observe the simultaneous expression in word and in writing of two genuinely intelligent statements each containing the word "I." But this brings us back to simultaneous intellectual behaviours, the existence of which we have seen to be more than doubtful. "Simultaneous consciousnesses" of an intellectual order must therefore be rejected, purely and simply because their existence as facts is indemonstrable, and even its possibility is very hard to accept.

Thereafter it is hardly necessary to examine the simultaneous duplication of the metaphysical unity of the individual. But we must not give the impression of shirking difficulties. Let us imagine that "simultaneous intellectual behaviours" and "co-existent consciousnesses" are ascertainable facts; can this be used to prove the possibility of a break in the ontological unity of the individual? Let

¹ Mignard, *L'unité psychique et les troubles mentaux*, pp. 124-5.

² Mignard, *op. cit.*, pp. 145-6.

³ Minkowski, "De la rêverie morbide au délire d'influence," in *L'évolution psychiatrique*, old series, vol. ii, p. 171.

us refuse for the moment to avail ourselves of the speculative argument arising from the fact that a splitting of the ego is inconceivable, and let us take our stand on the ground of the old facts provisionally accepted by Janet and Binet. Can we deduce from these "facts" a true dislocation of the personality? Certainly not. Binet himself is forced to admit it.

The division of consciousness, as it exists in the case of hysterical patients [he wrote] does not constitute a sharp line of demarcation, suspending all relation between consciousnesses. Far from it; the psychological phenomena of each group exert an incessant influence on the adjoining group, and the division of consciousness does not even suspend the workings of the associations of ideas; an idea associated with another rouses and suggests the other, although the two belong to different consciousnesses. The division then allows the automatism of images, sensations, and movements to continue. It consists simply in a limitation of consciousness; each of the egos is only aware of what takes place within its own domain.¹

This passage is decisive. If division of consciousness does not even suspend the workings of the association of ideas, the possibility of a metaphysical division of the personality cannot arise.

The conclusion to which we are brought by our examination of "disorders of the personality" is that the idea of a metaphysical division of the ego must be completely rejected. From the philosophical point of view, it is inconceivable. From the scientific point of view, there is no solid argument in its favour. But while categorically denying the possibility of an ontological split in the personality, we should be quite wrong, I think, only to see mythomania or malingering in the phenomena which, in order to avoid all misunderstanding, we shall henceforth call "disorders of personalization." As interpretations they are too convenient—let us be bold and call them lazy explanations which discourage the study of events which are complex and hard to analyse. We are in full agreement with Professor Claude's dictum: "Whatever may be said, we have not come to the end of the story as far as hysteria is concerned."²

Our metaphysical study of the unconscious has had as its main thread the theory of the mutual solidarity of realism and the psychic unconscious. Every realist must admit the concept of the psychic unconscious. Whoever admits the existence of the psychic unconscious must be a realist. Both the physiological theory and the theory of the plurality of centres of consciousness are incompatible with a true psychic unconscious. The emancipation of the unconscious

¹ Binet, A. P., p. 216.

² Claude, *Maladies du système nerveux*, second edition, vol. ii, p. 862.

from the conscious is chiefly exhibited in the neuroses and the psychoses. "Disorders of personalization" deserve further study, setting aside the idealist prejudice which confuses the unity of the person with the consciousness the person has of his own unity. But in the present state of psychiatry, these complex and much disputed phenomena cannot be used to further our knowledge of the unconscious.

II. The Various Types of Consciousness

Consciousness does not coincide with psychic activity: that is the essential conclusion of the foregoing discussion. But what is consciousness? Having eliminated its wide sense, we are left only with the narrow sense of the word "consciousness": the act whereby a person knows himself.

So defined, the concept of consciousness has an indisputable unity. The acts whereby a person acquires knowledge of himself have a sufficient mutual resemblance for the concept abstracted from their particular manifestations to be very clearly defined. Yet acts of conscious apprehension are not all of the same type. We may divide them into three groups: (i) proprioceptive sensations, (ii) sensory consciousness, (iii) intellectual consciousness.

We said in the foregoing section that *ordinary* internal sensations could not be unconscious in the strict sense of the word. This point must now be explained in detail. Since Sherrington, physiologists have recognized three possible fields of origin for reflex-provoking stimuli. The extraceptive field comprises all the stimuli from the external world which are peripherally received from the outside. The introceptive field is composed of the sum total of stimuli which are peripherally received from the inside, from the mouth to the anus. It is essential to note that whereas these stimuli are located in our body, they do not form a part of it. The proprioceptive field is composed of all parts of our body in so far as they stimulate other parts by internal paths. It is quite natural to model the division of sensations upon that of reflexes; henceforth we shall use the terms "extraceptive," "introceptive," and "proprioceptive" sensations. For the moment we are concerned only with proprioceptive sensations.¹

By definition, proprioceptive sensations have as their object a

¹ We insist on the term "proprioceptive sensations," for it is the only one that is accurate. If we speak of "internal sensations," it is uncertain whether we mean "introceptive" or "proprioceptive sensations." Moreover, the expression "cœnesthetic sensations" is only applicable to undifferentiated proprioceptive sensations, as distinct from the well differentiated, such as kinesthetic sensations. (D.)

part of our body *in so far as it is known to us as such*. When I look at my hand, although it is a part of my body, I see it in exactly the same way as I see any object which is not part of my body, e.g. the fountain pen I am holding. I see my hand, therefore, not by a proprioceptive, but by an extraceptive sensation. But when, with my eyes shut, I am aware of the position of my fingers by an internal sensation, that sensation is proprioceptive.

We must note some of the characteristics of proprioceptive sensations. They are strictly psychological phenomena (cognitions), and not reducible to pure material movements. They are not only cognitions, but "conscious apprehensions," for the objects of which they give us knowledge are apprehended as being our own. We say "conscious apprehensions" rather than "conscious states," for the latter term cannot in fact be employed by strict realists like ourselves; we can never be certain whether it means a psychic operation in itself, or our subsequent knowledge of that psychic operation. Besides being cognitive phenomena and conscious apprehensions, proprioceptive sensations are the only instance we can accept of spontaneous consciousness. Distinguishing between "spontaneous" and "reflected," we give the name "spontaneous consciousness" to a "conscious apprehension" which need not be preceded by any other psychic operation. Many writers (and among them some who claim to be realists) admit that all psychic phenomena are endowed with spontaneous consciousness. They hold that in an extraceptive sensation, such as the sight of a tree, we are aware of the material object and of our own sight of it *at the same moment*. They call this concomitant or direct consciousness, a concept which we categorically deny. It is quite logical for idealists to accept it, but we cannot understand how realists can come to defend it. The sensory operation whereby we see a tree is not a mode or a property of the tree, so that it is strictly impossible for us to apprehend both the tree and our own sight of it by one and the same act. In knowing the tree, we do not *by any means* know our own sight of it; we apprehend the latter afterwards, by a second act. The consciousness of extraceptive sensation is therefore a reflected consciousness, an act of cognition which implies another prior to itself. This prior act (the extraceptive sensation) is intrinsically unconscious. The case of proprioceptive sensation is quite different; it is an act of conscious apprehension, of cognition of self. This important difference depends upon the fact that the material object apprehended by proprioceptive sensation is our own body. Although proprioceptive sensation belongs to the psychological level, its object (our own body) belongs not to the psychological, but to the purely biological level. *Our body*

is a part of our ego. This fundamental truth has been almost completely ignored by post-Cartesian philosophy. The concept of a psychological consciousness reaching to a non-psychological life, which is none the less our own, has been lost through idealist prejudice. By a confusion between the object and the act, it was supposed that because the act was psychological, the object must also be so; hence doubt was cast on the existence of the external world and even on that of our own bodies. Exact analysis of the concept of proprioceptive sensation restores matters. Although proprioceptive sensation is a spontaneous conscious apprehension, a cognition of self preceded by no other cognition, it nevertheless maintains the dualism of the cognitive act and its object. When I am conscious (that is the right word) of my intestinal condition, my viscera are one thing, and my consciousness of them is another. Even in cognition of self, perfect identity is never reached, and there is always a certain dualism. We can dwell no longer on these points. Detailed examination of the concept of proprioceptive sensation inevitably leads to the problem of the union of soul and body.

The second group of acts of conscious apprehension includes all those whereby we acquire knowledge of our extraceptive sensations. We have not been able to avoid mention of them in the foregoing paragraph. Sensory consciousness is clearly of a psychological order; it is useless to stress the point unduly. But it must be emphasized that its object, i.e. extraceptive sensation, is also of a psychological order, a fact which sets a gulf between proprioceptive sensation and sensory consciousness. The former is a psychological consciousness of a biological life; the latter is a psychological consciousness of a life which is itself psychological. This essential difference has not always been sufficiently clearly expressed, even by contemporary psychologists. For a long time no proper distinction was made between proprioceptive sensation and sensory consciousness, and all too many traces of this old confusion are still to be found to-day. We said above that proprioceptive sensation was the only acceptable type of spontaneous consciousness, and that consequently consciousness of extraceptive sensation, or sensory consciousness, was always "reflected." This requires some explanation. The act whereby we consciously apprehend our vision is not itself vision; it is clear that we cannot *see* our vision. This is not true, as we shall see later on, of the intelligence and intellectual consciousness. If therefore we may only speak of reflection on condition that the second act is exactly the same as the first, we shall find no reflection in the instance of sensory consciousness, but only in intellectual consciousness. As applied to sensory consciousness, the word "reflection" must be

understood in a wide sense, as a second act cognizant of a first without being strictly of the same type. Let us describe it as *imperfect reflection*.

The third group of acts of conscious apprehension is comprised of those whereby we know our intellectual operations. Here we shall speak of "intellectual consciousness." This intellectual consciousness, as we have just implied, alone possesses the characteristic of *perfect reflection*. Perfect reflection is marked by the circumstance that both the direct act and the reflected act belong to the same class of psychic operation. We cannot see our vision, but we can conceive our conception, and judge our judgment. It follows that perfect reflection may be repeated indefinitely, as we said in our critique of idealism. We can judge, judge that we judge, judge that we judge that we judge, and so on. These operations are not by any means fictitious, as some philosophers have maintained; they are a *sine qua non* condition of self-criticism and of the revision of our convictions. Intellectual consciousness can not only apprehend intellectual operations proper, but can attain to the other psychic operations and their objects, since it is only one of the ways in which the reason works, and the domain of reason extends to all that exists. We can also consciously apprehend our sensations and our imaginations intellectually. The characteristics here ascribed to intellectual consciousness explain why above the simple psychism, as it is found in sensation and in imagination, we must recognize the privileged realm of the spirit.

III. The Various Types of Unconscious

Having defended the metaphysical possibility of the unconscious and defined the various forms of consciousness, we must now investigate the various types of unconscious and show, not only the possibility of their existence, but that they do exist in fact.

Let us begin by eliminating a problem which is of very great philosophical interest, but which does not enter our terms of reference—that of the substance of the ego.¹ We have explained above that even if we admit, in the widest measure possible, the authenticity of "disorders of personalization," this leads us to no deduction opposed to the metaphysical unity of the ego. We need not go beyond this conclusion, for the discussion of psycho-analysis does not require us to examine the ontological nature of the soul.

¹ It is necessary to point out that we are not here using the word *ego* in the specialized psycho-analytical sense, but in the general psychological sense. (Trans.)

Another philosophical concept which we cannot pass by is that of "tendency." Strict positivism tells us that there are only events, and that "tendencies" must be dismissed as "mythological entities." We need no other proof to show that this purely phenomenalist point of view is untenable than the evidence of that unimpeachable positivist, Stuart Mill, who declares that all physical causes may be counteracted, i.e. that from a purely factual standpoint, no universal laws can be formulated. The philosopher who knows no tongue but that of strict phenomenalism is precluded from stating a single truly general law. Let us take the case of gravitation. If we are to invoke no "mythological entity," we must say: all weighty bodies fall. But this is completely untrue; there are any number of weighty bodies which do not fall because they are prevented. We must therefore either dismiss all general formulæ, or say: weighty bodies *tend* to fall. But since no one has ever had, and never will have, sensory perception of a "tendency," it is clear that our assertion "weighty bodies *tend* to fall" is metaphysical. We might give any number of examples of this kind.

These facts [writes Stuart Mill] are correctly indicated by the expression *tendency*. All laws of causation, in consequence of their liability to be counteracted, require to be stated in words affirmative of tendencies only, and not of actual results.¹

Perfectly true, but how, after writing this highly Aristotelian passage, could Stuart Mill still think himself a positivist?

No science except that of pure mathematics can do without the concept of "potential state." We may refer the reader to Meyerson, who has undertaken a detailed demonstration of the thesis so concisely and dogmatically defined by Stuart Mill in the passage quoted, and *has illustrated it by some striking examples*.² *There is no reason* why psychology should deny itself a concept of which all the other branches of learning avail themselves. Modern thinkers, therefore, are more and more inclined to the idea of psychic dynamism. It matters little whether we say "faculty," "force," "tendency," "potentiality," "disposition," or "latent state." Whichever expression we use, we abandon strict phenomenalism, the purely descriptive point of view, and adopt the causal. One of the greatest masters of physical chemistry defined the work of the pioneers of atomism as "to explain the complications of the visible in terms of invisible simplicity."³ Psycho-analysis might well adopt the motto: "to

¹ Stuart Mill, *A System of Logic*, 1875, p. 517.

² Meyerson, *De l'explication dans les sciences*, chap. x, pp. 320-38.

³ Perrin, *Atoms*, trans. by D. Hammick, Constable, 1923, p. vii.

explain the complications of the conscious in terms of unconscious simplicity." That is to say that although analysis need not concern itself with the concept of "substance," it is absolutely impossible for it to do without that of "tendency." It is vitally necessary for analysis to accept the dynamic point of view.

The word "dynamism" has two very different meanings. It may either mean simply the assertion of the reality of potentiality as opposed to act, or the negation of substance in so far as the latter is distinct from potentiality to operate. In its first meaning, dynamism is opposed to mechanism or phenomenalism. In the second, it is opposed to substantialism proper. It is clear from what we have said above that we are here using the word "dynamism" in its first sense. We have never dreamt of identifying the idea of substance with that of potentiality to operate. But, we must repeat, the examination of the concept of substance is outside our terms of reference.

Having thus consigned the study of substance to metaphysics, we are led to claim for psychology the right to investigate the three levels of the unconscious—innate tendencies, acquired modifications of innate tendencies, and acts proper. At each of these stages we shall have to come to some conclusion as to the possible or actual existence of both the cognitive and the affective unconscious. Since controversy runs high round the concept of affective unconscious (which, we must admit, raises a serious difficulty), we shall begin our examination with the cognitive unconscious.

The first level of the cognitive unconscious, that of innate tendencies, is situated at such depths that one might without paradox maintain that it is related to philosophy rather than to science. Ever since mankind has been self-reflective, there have been rationalists and empiricists. The former regard the cognitive "faculties" as of two irreducible types—the senses and the imagination on the one hand, and reason on the other. The latter regard the cognitive "faculties" as all of the same type, there being only a difference of degree between the senses and reason. It would be tempting to relegate the dispute to the metaphysicians, and to make psychology begin with acquired modifications. But this would be an illusory solution. Acquired modifications themselves will be of one or of two types according as the innate tendencies which they complete are or are not reducible to a single type. Without seeking refuge in equivocation, the psychologist cannot avoid the choice between rationalism and empiricism. We have no hesitation whatever in choosing rationalism. But whereas the discussion of Freudian doctrine demands that one should take sides on the question of the primacy of reason, that of psycho-analytical method, on the other

hand, may proceed without forestalling the result of the conflict between empiricism and rationalism. In the immediately following chapters we shall merely have to make discreet use of the rationalist classifications; the question will be reopened in our last chapter on the life of the spirit. For the moment, we shall simply recognize the distinction between the senses, the imagination and the reason. We are quite aware of the constant criticisms directed against the concept of the "faculties of the soul," but unless we admit that through developing habits nothingness ends by acquiring capacities, we can see no means of avoiding the use of the unpopular and ill-reputed concepts of "substance" and "faculties."

The second level of the cognitive unconscious, that of acquired modifications, comes indisputably within the province of science. No one denies that the exercise of the senses, the imagination and the reason leaves traces within us. All who accept the homogeneity of cause and effect will regard it as clear that these traces, even when they are unconscious, are truly psychological and not merely physiological. How could a sensation, which is a psychological event, be preserved in the form of a purely physiological trace, to reappear later at the psychological level in the form of a memory? We ourselves can conceive of no such thing. We regard it as certain that unconscious traces of conscious psychic events are themselves psychic. This latent psychism is not inactive; it exerts a considerable influence upon our conscious psychic life. We do not think that this statement needs any demonstration after all the examples we have given the reader in our exposition of psycho-analysis. But it might be useful to emphasize the fact that the influence of unconscious traces on the conscious is by no means a psycho-analytical discovery, but a truth generally recognized. Here, for instance, are the views on this subject of a contemporary philosopher who is far from being a Freudian:

At the very moment when their action upon us is most effective, the greater part of our ideas are unknown to us, nor can we imagine them except indirectly. Let the reader analyse all the conditions necessary for his comprehension of the words he is reading. Must he not possess, at the moment of reading, a more or less accurate definition of all the words of the vocabulary, a more or less exact remembrance of all the rules of grammar he learnt when he was a child? He would no doubt be incapable of repeating the definitions or quoting the rules; yet the memory of them must have remained with him, otherwise he would be unable to understand what he read.¹

¹ Brunschvicg, *Introduction à la vie d'esprit*, p. 39.

This passage is in perfect agreement with the data of psychoanalysis, but a little later the same writer asserts that it is "impossible that anything within us should wholly and absolutely elude our consciousness, for it would then cease to belong to us, and we would no longer know that it was ours."¹

This is only an impossibility from the idealist standpoint. In the realist view, the appertaining of an act to the ego is based upon the causal emanation of that act from the ego; the conscious apprehension of the emanation is secondary and supplementary. It follows therefore that it is only by inference that we recognize certain acts as our own.

The third level of the cognitive unconscious, that of acts, requires close examination. In the first section of this chapter we have justified, in principle, the possible existence of unconscious psychic acts. We must now pass from their possible to their actual existence, first considering whether, in certain types of act, the possibility of unconsciousness may not be held in check by special conditions. Let us clearly define the difference between the second and the third levels of the unconscious. The second level is composed of potentialities, of traces of preceding acts. These elements may be in a state either of pure, inactive latency, or of active latency. In psychoanalysis, it is this active, latent unconscious that plays the greatest part. It is important not to confuse active latency with actuality proper. The latter requires new knowledge, whereas active latency is merely the influence of the past. The metaphysical discussion in the first section has, we hope, made clear our distinction between actuality and conscious actuality. We thus arrive at the following classification: inactive latency, active latency, unconscious actuality, and conscious actuality. We need no longer concern ourselves with the latency, active or inactive, derived from the second level of the unconscious; the problem before us now is to ascertain whether new and unconscious psychic acts do *in fact* exist. If the general philosophy we have outlined above is accepted, it is simply a question of proving that intrinsically unconscious acts do not become secondarily conscious. But we may also abstract these metaphysical considerations, and directly examine whether it is possible to demonstrate experimentally the existence of psychic operations which remain unconscious. As far as extraceptive sensations are concerned, we think we may safely answer in the affirmative. Writers of every school give examples of oneiric or hallucinatory images representing objects close by which the person has passed, but

¹ Brunschvicg, *Introduction à la vie d'esprit*, p. 41.

which he is quite unconscious of having seen.¹ It may of course be objected that there is nothing to prove that there has not been instantaneous consciousness followed by oblivion. In strict logic, this objection is irrefutable. In instances of this kind, it cannot be shown that the sensory record has been either conscious or unconscious. There are, however, certain instances in which the hypothesis of instantaneous consciousness is rather improbable, and will only be adduced by those whose metaphysical orientation leads them to deny any unconscious psychic operation *a priori*. Here is an observation from my own personal experience. My wife, my mother-in-law and myself were sitting on a bench in the public gardens at Rennes. My wife was talking to her mother, while I read the book by Maurice Garçon and Jean Vinchon entitled *Le Diable*. At a certain moment, I several times repeated the words "Herr Trippa," the name of one of the characters in the book. My wife did not hear me, and went on with her conversation. After some time she turned to me and said "triptych"; when I asked her why, she had to reply that she did not know. I then told her that I had just repeated "Herr Trippa" several times, that she must have heard me unconsciously, and that this unconscious hearing must have brought the word "triptych" to her mind by association. She told me that she was quite unconscious of having heard me. In a case of this kind, the hypothesis of instantaneous consciousness followed by oblivion can clearly only be defended for dogmatic reasons. Further evidence is also provided by the process of metacontrast, the name given to Stigler's discovery that "a brief luminous impression in a certain part of the retina is more or less effaced by a similar consecutive impression in a neighbouring part."² In examining Stigler's phenomenon by means of a revolving disc, Piéron made an interesting observation which closely concerns the point we are discussing. The mechanism used (for a description of which we would refer the reader to Piéron's article quoted in our footnote) ought to make visible three light concentric circles. But owing to the metacontrast, the spectator sees two light rings enclosing one dark. Moreover (and this is the interesting point) "the imperceptible enclosed field acts on the retina while the two enclosing rings are still being perceived."³ This action is reproduced as an impression that the rings are rotating eccentrically. In this case, I do not see how instantaneous consciousness followed by oblivion can possibly offer a loophole, for it is

¹ Janet, N. I. F., pp. 415-17; cf. Jastrow, *The Subconscious*.

² Piéron, "Le processus du métacontraste," in *Journal de psychologie*, thirty-second year, No. 1, p. 5.

³ Piéron, *Art. cit.*, p. 11.

while the spectator is unconscious of seeing the enclosed field that the latter acts upon him to produce the impression of eccentricity.

Whereas the existence of unconscious extraceptive sensations raises no theoretical difficulties in the minds of those free from idealist prejudice, and whereas it is firmly borne out by facts, the situation is apparently very different as far as proprioceptive sensations are concerned. By definition, proprioceptive sensations make us aware of our own body *in so far as it is ours*, and not as if it were an external object. By definition, consciousness is knowledge of self. How, therefore, can we speak of unconscious proprioceptive sensations without contradiction in terms? In the case of extraceptive sensation, the realist point of view enabled us to demonstrate its intrinsically unconscious quality. But here we are not dealing with knowledge of the external world, but with that of our own body. So great is the difficulty, that even the most radical realism seems unable to overcome it. Have we not had to recognize, in the second section of this chapter, that proprioceptive sensation was essentially an act of conscious apprehension? The facts seem to give the lie to this theoretical conclusion. In certain dreams, the dreamer ascribes his own physiological condition to someone else. Discussion of instances of this kind necessarily encroaches upon that of unconscious affective states, for proprioceptive sensations are often of strong affective tone. There is doubtless no necessary link. I can quite conceivably be aware of the position of my arm by internal sensation, without that sensation having the slightest affective tone of either pleasure or pain. It is none the less true that proprioceptive sensations and affective states are very closely related. In the following example, it is very hard to differentiate between proprioceptivity and affectivity:

I dreamed [writes Havelock Ellis] that I was watching a girl acrobat, in appropriate costume, who was rhythmically rising to a great height in the air and then falling, without touching the floor, though each time she approached quite close to it. At last she ceased, exhausted and perspiring, and I had to lead her away. Her movements were not controlled by mechanism, and apparently I did not regard mechanism as necessary. It was a vivid dream, and I awoke with a distinct sensation of oppression in the chest. In trying to account for this dream, which was not founded on any memory, it occurred to me that probably I had here the key to a great group of dreams. The rhythmic rising and falling of the acrobat was simply the objectivation of the rhythmic rising and falling of my own respiratory muscles.¹

¹ Havelock Ellis, *The World of Dreams*, pp. 134-5.

Let us for the moment dismiss all that relates to affectivity proper. The fact remains that in dreams of the type described by Havelock Ellis (of which instances could be found in many writers¹) the only possible interpretation seems to be that the dream-images are provoked associatively by unconscious proprioceptive sensations. Yet the concept of unconscious proprioceptive sensation appears to be contradictory. I hesitated long before this difficulty. To solve it, I should be inclined to admit that proprioceptive sensation, as it has been defined above, is neither simple nor primary. Prior to it, there would seem to exist a more elementary sensation, which I propose to call *organoceptive sensation*. The internal quality of organoceptive sensation would be purely physiological, not psychological; it would make us perceive our body simply as *body*, not as *ours*. Proprioceptive sensation *stricto sensu* would appear at a later stage of its evolution. This schema seems to be no more than a pure and simple translation of the dream phenomena described above.

It will perhaps be objected that our distinction between organoceptive sensation and proprioceptive sensation *stricto sensu* destroys all difference between knowledge of our own body and that of the external world. The stages would be the same in both cases: first an intrinsically unconscious sensation, then an act of conscious apprehension through imperfect reflection. This objection seems to us to be groundless. In the case of extraceptivity, knowledge of an external material reality is followed by knowledge of that knowledge. In the case of proprioceptivity, knowledge of an internal material reality, apprehended simply as reality, is followed by knowledge of the same material reality as being explicitly our own. We see that there is a fundamental difference between the consciousness of extraceptive sensation and that of proprioceptive sensation in the strict sense. The consciousness of external sensation is the knowledge of a knowledge; it is an imperfect reflection, with a psychological object. Internal sensation, on the contrary, even when complete and conscious, is not the knowledge of a knowledge nor a reflection (even imperfect); its object is purely physiological. Therefore the acceptance of organoceptive sensation as a preliminary stage of proprioceptive sensation does not end in the complete assimilation of all the mechanisms governing conscious apprehension of external sensation and of our own body.

These explanations tend to the conclusion that, contrary to our first expectations, the controversy between idealism and realism is here too involved. The assertions that our body can be perceived by means which are physiologically but not psychologically internal,

¹ Lhermitte, S., p. 120.

that it is first known as a body and only subsequently as our own, have no meaning except from the strictly realist standpoint. We shall certainly not object to this conclusion, but we must confess that we had not foreseen it. Dreams which seem to be derived from unconscious proprioceptive sensations have for a long time presented us with a real intellectual stumbling-block. We could not deny their reality, yet we could not conceive their possibility. It was not till we had fitted our schema to the facts and worked out the concept of organoceptive sensation that we saw that a more strict logician than ourselves could have deduced that schema *a priori*, from the fundamental principles of realism, at least as a possibility. The problem of the person's knowledge of elements which belong to him, but of which he is not aware as being a part of himself, does not arise only in connection with unconscious proprioceptive sensations; we shall meet it again when we are investigating the possibility of unconscious affective states.

The problem of unconscious images naturally follows that of sensations. Let us recall that in our view the distinction between sensation and image consists in the fact that sensation ends in the apprehension of the physical existence of an external or internal material reality, whereas the object of imagery is either past or potential. This distinction, based on the qualities of the object, must not be considered as a simple extrinsic denomination of sensation or image. In actual fact, both the present and the absent object occasion an intrinsic variation in the mode of cognition whereby they are apprehended. We need not here examine images which are simple reproductions of the past; we discussed them when dealing with the second level of the unconscious. For the moment we are only concerned with really novel images. Can it be proved that strictly unconscious novel images do in fact exist? I do not see how such a proof could be adduced. In the case of sensations, the conditions were much more favourable. In extraceptive sensation, we ascertained the presence of a stimulus, as the cause of sensation, and of a conscious image, as its effect. The existence of the sensation was therefore obvious. In proprioceptive sensation, we apprehended the conscious dream-image, the effect of the sensation, and on waking the sensation itself became conscious. Here again the proof was easy. But the case of the unconscious novel image is quite different. We can apprehend it neither from its causes nor from its effects. If we start with a conscious novel image, we shall at the most end with an old image, reproducing a sensation, and with an unconscious elaboration of this old image. But an unconscious elaboration is not a novel image; it is merely the process leading thither. More-

over, no other starting-point for investigation seems to be available. The conclusion seems to me clear: novel unconscious images are perfectly possible, but their existence cannot be demonstrated.

Before we leave unconscious cognitive acts, we must examine rational operations. Can there exist, or do there exist in fact, unconscious concepts, judgments and ratiocinations? Before coming to discussion, we must meet a preliminary objection. In the view of most contemporary philosophers, concept has no existence prior to judgment. This is a contention we cannot accept. If we examine the arguments in its favour, we find that they are merely applications of the fundamental principle of idealism. Having taken up a position definitely opposed to idealism, it is our business strictly to reject all that follows from it. We should ourselves be more than willing to write some hundred and fifty pages in criticism of the doctrine of the priority of judgment over concept, but they would certainly be out of place in a work on psycho-analysis. Denying ourselves this excursus, we may say that we see no objection to the possibility of unconscious concepts. Since the concept is concerned only with objects, there is nothing to prevent the mind from working out a new concept without being aware that it is doing so. But can the existence of this type of phenomenon be proved? Here again we believe that the strict proof cannot be provided. The hypothesis of an unconscious elaboration, preparing the formation of a concept without going so far as to express it, is fully sufficient.

Although we have no objections to make to the possibility of novel unconscious concepts, this does not hold good of novel unconscious judgments. Whereas sensation, image and concept are not, strictly speaking, true or false, judgment must necessarily be either one or the other. When I say: "This river is frozen," I am not simply thinking of the river and the ice separately, nor even evoking the ice in connection with the river associatively; I am asserting the conformity of the intra-mental relation of my ideas with the extra-mental relation of the realities which they represent. *Judgment is therefore conscious by its very nature.* Of course, we must not exaggerate and identify ordinary judgment with the type of reflected judgment: "It is true that this river is frozen." It is none the less true that direct judgment implies a beginning of reflection, and that therefore wholly unconscious judgments could not exist.

Various objections may be raised against the necessarily conscious quality of judgment. A first difficulty is drawn from the phenomena of scientific inspiration, in which judgments seem to appear in the inventor's consciousness *already worked out*. We have met this problem above. In our view, what takes place in the unconscious is

a work of elaboration which does not go as far as judgment proper. Poincaré, who has admirably described the phenomena of scientific *inspiration from his own experience*, has been at pains to protest against the tendency of certain psychologists to exaggerate the role of the unconscious.¹ Delacroix has, it seems to me, perfectly defined the exact limits of the jurisdiction of the unconscious, in the following passage:

Ideas can be united in the subconscious: apparently even intuitive thought reaches that level: the confused syntheses which lie at the origin of judgment may there be worked out: but the unconscious can only make suggestions to the reason: its data only become judgments by means of a process accompanied by consciousness. It is true that very often the discoveries suggested to us by the unconscious are already very elaborate and very near judgment, so that judgment is formulated immediately and without difficulty, and appears to have been already formed in the unconscious.²

A second difficulty is drawn from "disorders of personalization." Spiritualistic mediums and hysterics exhibit phenomena such as automatic writing, in which novel judgments are undeniably present. Since these judgments are not apprehended by the principal consciousness, we must either declare them wholly unconscious, or admit that they are known by a secondary consciousness. Since we have already rejected the theory of the plurality of centres of consciousness, it seems that we have no option but to recognize the possibility of unconscious judgments. We believe the solution of this difficulty may be deduced from our criticism of "co-existing personalities," which ended by reducing them to rapidly alternating consciousnesses. If we accept this interpretation, we shall say that the cases in question involve conscious judgment followed by almost instantaneous amnesia. Flournoy, who took little or no interest in the metaphysics of judgment, reached this concept of rapidly alternating states of consciousness simply through observation of his patient. He describes states which at first sight only seem to be explicable on the theory of double simultaneous consciousness.

The organism seems to be divided into two beings, strangers to one another, Leopold speaking through Helen's mouth, with her voice and his own ideas, while Helen complains in writing of inexplicable headache and sore throat.

Yet [Flournoy continues] even in these cases of division which

¹ Poincaré, *Science and Method*, trans. Francis Maitland, Nelson, 1914, pp. 46-63.

² Delacroix, "Les opérations intellectuelles," in Georges Dumas, T. P., vol. ii, p. 151.

seem to effect complete splitting of consciousness, and a true co-existence of different personalities, it may be doubted whether that plurality is any more than a semblance. I am not sure that I have ever observed in Helen the true simultaneity of different consciousnesses. At the very moment when Leopold is writing with her hand, speaking through her mouth, or dictating by raps on the table, I have always found her, on careful observation, absorbed, pre-occupied and distraite; but she immediately recaptures her presence of mind and the use of her waking faculties when the motor automatism is over. When she used herself to spell out the rapping dictation, I often noticed that she stopped at the necessary letter (not at all like a person trying to guess) before the table had rapped, and I had the impression that this spelling, derived apparently from her ordinary personality, was really coupled with, and fundamentally identical with the muscular automatism which was acting upon the table. In short, I believe that what outwardly appears to be a co-existence of distinct simultaneous personalities is no more than an alternation, a rapid succession between the state of Helen-consciousness and the state of Leopold-consciousness (or any other). And in cases in which the body seems to be shared by two independent beings, the right side, for example, being occupied by Leopold, and the left by Helen or the Hindoo princess, I have never regarded the psychic division as radical, but several indications have given me the feeling that beneath it all there lay a completely self-conscious individual, who was acting in perfect good faith, to himself as well as to his audience, the farce of plurality. A single fundamental personality, asking questions and giving answers, at strife with itself, playing various parts, of which the "Miss Smith" of the waking state is only the most continuous and the most coherent—that is an interpretation which would fit the facts as I observed them in Helen, as well, if not better than a plurality of separate consciousnesses, a psychological polysoism, so to speak.¹

I have deliberately quoted this passage from Flournoy in full, for hardly any other observation of a medium would bear comparison with his masterly work on Helen Smith. This exceptionally remarkable case does not furnish the slightest proof of the existence of truly unconscious judgments. Hodgson seems to have observed a simultaneous duplication of psychic activity in the case of Mrs. Piper. Mrs. Sidgwick, in her general study of that famous American medium, expresses herself with great reserve on that point.²

We now find ourselves able to maintain that no instance of simul-

¹ Flournoy, *Des Indes à la Planète Mars*, pp. 115–16.

² Sidgwick, "A Contribution to the Study of the Psychology of Mrs. Piper's Trance Phenomena," in *Proceedings of the Society for Psychical Research*, part lxxi, vol. xxviii, pp. 33–9.

taneous duplication has been indisputably proved. It should not be necessary to add that if unconscious judgments do not exist, unconscious ratiocinations could not possibly do so.

We have in turn investigated the three levels of the cognitive unconscious, and must now follow the same course for the affective unconscious.

The first level of the affective unconscious, that of innate tendencies, is of interest primarily to metaphysicians. We shall not dwell upon it. Let us simply say that, as we divided cognitive tendencies into sensitivity and reason, so we shall divide affective tendencies into instinctivity and will. Pleasures and pains, emotions and passions, are derived from sensations and images. Spiritual feelings (love of truth, of beauty, or of moral good, and free choice) are derived from the reason. Attention must be drawn to the fact that in our classification, the will is not only the source of free choice, but the seat of the necessary, non-deliberate impulses of attraction towards rational objects. We regard the will as a "rational appetite" capable of emitting all the affective impulses, free or determined, which arise from the exercise of reason.

The second level of the affective unconscious is composed of the acquired modifications of innate tendencies. There is no doubt that the exercise of affectivity, whether instinctive or voluntary, leaves traces within us. Although in themselves unconscious, these traces profoundly modify our subsequent affective behaviour. Our future is the child of our past—a dictum which is perhaps even more applicable to the affective than to the cognitive field. The affective traces may, of course, be found not only in the state of active latency just mentioned, but also in the state of inactive latency.

The third level of the affective unconscious (if it existed) would be formed of novel, unconscious "affective operations." The expression "affective operation" is rather unusual, but we are absolutely bound to distinguish affectivity in a state of active latency from strictly actualized affectivity. We have therefore to ascertain whether the actualization of affectivity may be separated from its conscious apprehension. We have seen that in various instances of cognition actualization could be, and sometimes was in fact, separate from conscious apprehension; extraceptive sensations can be, and sometimes are in fact unconscious; organoceptive sensations are always unconscious by definition; the formation of novel representations, both imaginative and conceptual, may be unconscious, but there is no strict proof that it ever is so in fact. The case of affective operations is quite different; we believe it impossible to admit that they are ever wholly unconscious.

We are not alone in this view. Most psychologists agree in recognizing that an affective state cannot be actual without being consciously experienced. One cannot conceive of an unconscious pleasure or pain. The reason for this impossibility is clearly apparent when the conditions governing the appearance of pleasure and pain are submitted to philosophical analysis. There are, of course, two principal theories of pleasure and pain. The so-called activist, or finalist, or biological theory emphasizes the dependence of pleasure upon the normal exercise of any vital activity; pleasure is regarded as the direct result, without passing through any intermediate cognitive stage, of the attainment of an end. The so-called intellectualist theory, on the contrary, pays most attention to the role of cognition and minimizes that of finality; pleasure is regarded as derived from the co-existence of two complementary representations. Each of these theories only takes one aspect of the situation into account: finality and knowledge are equally indispensable determinants of affective states. The development of pleasure or pain may be schematized as follows: There must first be a finality directed towards a vital end, a need. It is most important to note that this finality is a purely ontological fore-ordained condition which it would be fatal to mistake for a wish. It may be solely physiological, e.g. the living being's nutritional needs. Secondly, there must be a reality capable of gratifying this need; in our example this would be food. Thirdly, there must be physical conjunction of the need and its object; i.e. the introduction of food into the organism. Fourthly, that conjunction must be cognized; a proprioceptive sensation will inform the animal of the change effected in its body by the assimilation of food. Fifthly, this knowledge will expand into a pleasure hardly distinguishable from it by introspection; this is the affective operation proper. The schema of pain is obtainable by directly transposing the above. We have taken an organic pleasure as an example, but a spiritual joy would serve as an equally good illustration. Let us analyse the satisfaction of the inventor. We have firstly the aptitude of the intelligence to possess truth; secondly, an intelligible object capable of supplying that aptitude; thirdly, the conjunction of the intelligence with its object in discovery; fourthly, the conscious apprehension of this intellectual enrichment; fifthly, the final perfection of affective development, i.e. the joy of knowledge.

This schema shows why unconscious affective states cannot exist. Pleasure, for example, presupposes knowledge of the conjunction between our vital aim and the object capable of gratifying it. Pleasure is therefore essentially conscious. *Mutatis mutandis* the same is true of pain. It goes without saying that our schema utterly

excludes the possibility of pure affective states, i.e. those wholly independent of prior cognitive states. We regard the concept of pure affective state as completely unintelligible, and believe that the alleged examples of it do not bear investigation.¹

We categorically deny the existence, possible or actual, of unconscious affective operations. Before discussing various (not easily explicable) phenomena which militate against this denial, we must state our classification of affective operations. We have contrasted instinctivity and volition. Among the affective impulses derived from instinctivity, we believe that a sharp distinction must be made between affective sensations and emotions. The former (physical pleasures and pains) are derived exclusively from proprioceptivity, a fact which may be easily deduced from the above schema. The physical ingestion of food, and the perception of that ingestion by a proprioceptive sensation, are indispensable for physical pleasure proper. If we simply show an animal food, we excite an emotion and not a physical pleasure. It is clear therefore that it is not the dependence of the affective state on any sensation that differentiates physical pleasure and pain from emotion, as certain writers maintain. Proprioceptivity is a necessary condition of physical pleasure or pain. On the one side therefore we shall set affective states dependent upon proprioceptive sensations, and on the other, those dependent upon extraceptive sensations, images or memories. On closer examination we shall see that the imagination plays much the most important part in the phenomena of the second category. In itself, visual sensation cannot show an object to be useful or harmful. Its useful or noxious quality, therefore, can only be appreciated either in terms of a prior experience (i.e. memory), or by means of innate discernment (i.e. by instinct). Extraceptive sensation, therefore, simply acts as a trigger; the image, innate or acquired, is the only true governing factor. The dualism of emotion and affective sensation must not, however, make us lose sight of the far-reaching unity of instinctivity. It is no more easy to explain why a cut hurts than why a newly-hatched caterpillar is attracted by green leaves. Some modern psychologists criticize the concept of instinct, which they seek to identify with experience of physical pleasure and pain, apparently unaware that they are moving in a vicious circle. Neither in emotion nor in affective sensation can we avoid the appeal to an intuitively apprehended finality.

These considerations are a sufficiently clear indication that we

¹ Compare, on this point, our critique of "affectivism," published in the fourth collection of essays on natural philosophy, *Views on Animal Psychology*, pp. 103-10. (D.)

do not support the theory of emotion suggested by Lange and James. In our view, every instinctive operation, whether affective sensation or emotion, is both psychic and organic. It is clear from the evidence that organic changes are an integral part of emotion. But it is a far cry from this to the identification of emotion with consciousness of these organic changes. Emotion is an affective reaction, both psychic and organic, to an object either perceived as external to our own body, or imagined, or recalled to memory. Sensation of pleasure or pain is an affective reaction, both psychic and organic, to a change in our own body perceived as such.

Among the operations of instinctivity we have distinguished between affective sensations and emotions. Passing from instinctivity to volition, we find two major groups of voluntary movements—spiritual feelings and free choices. Spiritual feelings are movements (neither deliberated nor free) proceeding simply from the presentation to the will by the reason of a good or an evil. The narration of a splendid achievement is enough to arouse in the hearer, before any free choice, an impulse of admiration and a desire to imitate it. Consciousness of wrong-doing excites a feeling of remorse. There is no need to define the concept of free choice.

Having thus classified the operations of instinctivity and of volition, we must investigate the factual evidence for the assertion that some of them may be unconscious. This evidence is taken from disorders of personalization, and concerns affective sensations; frequent mention of it is to be found in early case-histories of hysteria.

It sometimes happens [writes Alfred Binet] that when the insensible hand is pricked behind the screen it draws back hastily, and the subject cries, "You hurt me!" An unprejudiced observer who was present at this experiment for the first time would be justified in concluding that the subject had not lost sensibility; but attention must be called to the fact that the subject utters these words unconsciously. When he is spoken to again to ask if the pain was very severe, he replies that he has felt nothing, and he even insists that he has not said a word. His testimony, taken by itself, would undoubtedly appear suspicious; but if this subject shows also anæsthesia regularly established, and if he has unconscious movements greatly developed, we should be disposed to admit the sincerity of his assertion. We then come to see that the subconscious personage within him perceived the pain, and that this personage who can express pain by movements of the hand, can also express them by means of speech.¹

William James has published a case-history of automatic writing

¹ Binet, A. P., p. 120.

in which he observed a phenomenon exactly similar to that described by Binet.

One of the above accounts goes back to the stone age of the Salpêtrière school of hysteria; the other is surrounded by a vaguely psychological atmosphere. This will be enough for many psychologists and psychiatrists to condemn them as unworthy of investigation. But the following account is quite untainted with the musty odour of hysteria or occultism; it is quoted verbatim from the report of a psycho-analytical congress.

M. Pichon would like simply to contribute a personal psycho-clinical experience, which may perhaps shed some light on the problem of psychic dissociations. After having pricked himself when dissecting, the speaker suffered from purulent arthritis of the left thumb, which was lanced by the late M. Tuffier. He was anæsthetized with ethyl-chloride, and during narcosis he (i.e. the personality whose connected memories he can recall) felt no pain, yet he heard his ordinary voice crying out loud: "God, how you're hurting me! Don't hurt me so much!" When he awoke, the surgeon reproached him for his cries, and he answered: "I felt no pain, and it wasn't I that cried out." During narcosis, therefore, the pain reached a psychic level which could make use of the patient's linguistic faculty to express it; but the faculty of hearing remained in the possession of the central psychic level, whose impressions were later to be integrated in M. Pichon's memory.¹

Dr. Pichon's self-observation seems to present an insurmountable difficulty to our theses. It seems to admit of no interpretation except on a recognition of two simultaneous and disparate psychic dispositions. If we maintain that the disposition not integrated in the main waking consciousness was unconscious, we find ourselves faced with an unconscious pain and an unconscious judgment, an interpretation which cannot be reconciled with the words "Don't hurt me so much." We are forced therefore to recognize that the disposition manifested by the protests was conscious to a secondary consciousness strictly co-existent with the main consciousness. This involves the failure of our theory.

The difficulty can perhaps be obviated. Dr. Pichon's protests may quite well be a pure automatism with no psychological quality. Before the operation, he must certainly have thought of the possibility of pain; such phrases as "You're hurting me; don't hurt me so much" must have occurred to his consciousness, or at least have been developed beneath its level; their motor discharge was inhibited

¹ *Revue française de psychanalyse*, vol. v, No. 1, p. 177. The account is by Dr. Pichon himself.

by the waking reason, but as soon as the latter was no longer capable of exercising control, the verbal automatism was liberated. This motor-lag in relation to ideation is not invented to serve our purpose: I have had personal experience of it. In attempting one day to realize Chevreul's pendulum-experiment, I was thinking of rotatory movement in a certain direction, but without any unconscious motion of my arm. I then started to think of something else, and a few seconds later found, to my great astonishment, that I was executing the movement I had ceased to imagine. A movement, therefore—whether of the arm or the tongue makes no difference—may follow the image from which it originates after a distinct interval. Is not this a possible explanation of Dr. Pichon's strange experience?

The objection may be raised that the suggested explanation would be valid if Dr. Pichon's were the only similar experience recorded. But the interest of this psycho-analyst's experience lies in the very fact that it causes us to revise our estimate of the early case-histories of hysterical dissociation, among which we shall find many which do not admit of the explanation in terms of automatic discharge of a prior ideational process. Here is an example from Binet's investigations of hysterics:

We take the insensible hand [he writes] place it behind a screen, and prick it nine times with a pin. During this time, or after ceasing to prick it, we ask the subject to think of any number whatever and tell us what it is. He replies that he has chosen the figure 9, that is to say, the one that corresponds to the number of pricks. He did not feel the thrust of the pin, he did not know that he had been pricked, he was anæsthetic; but nevertheless he must have felt something, as the agreement clearly shows. The stimulus, although neither felt nor perceived by the normal ego, produced a certain effect upon this ego, and caused an idea—the idea of the number of pricks.¹

In this instance it is clear that the figure 9 could not have been prepared in the patient's mind before the experiment. Absolutely similar phenomena are found in normal persons' dreams. A painful sensation, which only becomes conscious on awaking, evokes dream-images in which the pain is ascribed to someone other than the dreamer.² We discussed a very similar question when dealing with dreams of impersonal imagery provoked by proprioceptive sensations which only become conscious on awaking. Having carefully distinguished affective sensations from simple proprioceptive sensations, we worked out the concept of organoceptive sensation in order

¹ Binet, A. P., pp. 205–6.

² Lhermitte, S., p. 120.

to explain dreams apparently derived from unconscious proprioceptivity. This concept is of no help to us here; a part of our own body may conceivably be apprehended simply as a material object, but it is impossible to maintain that pain could appear as something neutral and impersonal. It seems that we are forced to revert to our previously rejected theory of the simultaneous plurality of consciousnesses.

However convincing the accounts we have just quoted may be, we believe that no proof of the falsity of our theories can be deduced from them. It is important to note that our opponents have to prove a negative proposition—that instantaneous consciousness followed by oblivion has not taken place. All logicians know how difficult such a task is. But that is not the only obstacle they will have to meet. If the negative proposition in question were related to the present, it might be maintained that its probability was such that it was practically equivalent to demonstrative proof. But we have recognized that in relation to past time, the hypothesis of instantaneous consciousness followed by oblivion is irrefutable. We may not remember that we have been conscious; but we cannot remember that we have not been conscious. Memory of a purely negative content cannot exist. But it may be objected that while our arguments are logically correct, we are entrenching ourselves in the position of pure abstract possibilities and making our decisions on purely metaphysical grounds, instead of accepting the interpretation which seems to rise naturally from the facts. We do not believe that in the instances under discussion our opponents' interpretation is the natural conclusion from the experimental data. It is important to emphasize that we are dealing here, not with ordinary memories, but with memories bearing upon abnormal or inferior psychic states—narcosis, hysteria, hypnosis, and sleep. It is a well-known fact that the memories belonging to the various psychic levels can only be fused with great difficulty. In these circumstances, it seems to us that the conclusions which our opponents draw from the waking memory of what has taken place (or rather of what has not taken place) during narcosis, hypnosis or sleep, has no demonstrative importance.

Later when we are examining Freud's theory of the unconscious, we shall see that a quite different interpretation may be suggested for the events we are discussing. Since that interpretation is based upon certain concepts which Freud did not introduce until quite late and which we have not as yet defined, it would be out of place here.

We hold then that the hypothesis of alternation of consciousness

is enough (at least temporarily) to account for the phenomena quoted against us, and we persist in our rejection of unconscious affective operations, as well as of co-existing consciousnesses or simultaneous disparate intellectual dispositions.

Even if here we remain unsupported, and if it is thought necessary to admit either wholly unconscious affective operations or co-existing consciousnesses, the bulk of our theories of the unconscious would nevertheless hold good. If the existence of unconscious affective operations (e.g. of unconscious pains) is maintained, it becomes even more necessary to recognize the existence of unconscious cognitive operations and all our realist conclusions. If the plurality of simultaneous consciousnesses is accepted, our arguments in favour of the possibility, in other cases, of strictly unconscious psychic operations holds good none the less. Moreover, as we pointed out when quoting Binet, the persistence of the associative link between the various consciousnesses must force us to recognize both that the metaphysical unity of the ego persists, and that it does not consist of self-consciousness. That is to say, the realist point of view still commands assent.

Affective sensations are the only instinctive operations which may raise a difficulty from the point of view of unconsciousness. For the philosophical reasons given above, we also deny the possibility of actual unconscious emotions. This point of view runs no risks, for it is impossible to see how their existence could be established.

Where the will is concerned, we reject, on the same theoretical grounds, the possibility of unconscious spiritual feelings or free choices. Here again it is quite impossible to see how the facts could be demonstratively quoted against us.

An important conclusion seems to us to arise from our long discussion of the various types of the unconscious: the unconscious elements most important to science are acquired modifications of innate tendencies. Their existence is beyond all discussion, and from what we said in Volume I, their dynamic quality can hardly be disputed. Innate tendencies are of interest principally to the philosopher. Only certain psychic operations proper—those of a cognitive order—can be realized unconsciously. Moreover they are of very little psycho-analytical interest.

IV. The Freudian Unconscious

Having stated our own conceptions of the unconscious, we must now proceed to compare them with those of Freud, and define which of his theories on this subject we propose to accept or to reject.

Freud defends the existence of the unconscious with remarkable firmness. He refuses the slightest concession in terminology—the use of the word “subconscious,” for example. He wages continual war against the tendency, so common among psychologists, to regard the unconscious merely as a by-product of conscious activity. In reading his works we have often had the impression that he comes nearer than any other modern investigator of the psychism to the realist doctrine as stated in this chapter. We might quote many passages from his works in support of this theory, but the two following must suffice. The first is taken from *The Interpretation of Dreams*.

A return from the over-estimation of the property of consciousness is the indispensable preliminary to any genuine insight into the course of psychic events. As Lipps has said, the unconscious must be accepted as the general basis of the psychic life. The unconscious is the larger circle which includes the smaller circle of the conscious; everything conscious has a preliminary unconscious stage, whereas the unconscious can stop at this stage, and yet claim to be considered a full psychic function. The unconscious is the true psychic reality; *in its inner nature it is just as much unknown to us as the reality of the external world, and it is just as imperfectly communicated to us by the data of consciousness as is the external world by the reports of our sense-organs.*¹

In his latest works, Freud maintains exactly the same point of view. In his short essay entitled *The Ego and the Id*, he writes:

Psycho-analysis cannot accept the view that consciousness is the essence of the mental life, but is obliged to regard consciousness as one property of the mental life, which may co-exist along with its other qualities or may be absent.²

These passages are of so clear a stamp that it seems to us impossible to dispute Freud's frankly realist orientation. Unfortunately he is not a philosopher, and it would be hazardous to ascribe to him a metaphysical system which he has not openly professed.

Even when I have moved away from observation [he writes] I have carefully avoided any contact with philosophy proper. This avoidance has been greatly facilitated by constitutional incapacity.³

Confessions made on an ironical note are often the most sincere. Freud is well aware of his greatest deficiency, and may even have been distressed at it. We shall not therefore interpret his words as though

¹ I. D., p. 562. *Italicized in the text.*

² E. I., p. 9.

³ A. S., p. 109.

they bore the signature of a thorough-paced metaphysician. *We shall say that Freud is inclined towards psychological realism, rather than that he professes it.*

Our interpretation is not solely based on the passages quoted; it is primarily a general impression, the result of prolonged reflection on Freud's work. We can only understand his thought in terms of realism. It may be said that this is because we ourselves support that particular philosophy, but such an explanation would be quite insufficient. Its worthlessness becomes apparent when we remember that the opposition to the Freudian conception of the unconscious is radically idealist in origin. We may trust the clarity of vision of Freud's opponents.

Freud's realism is the scientist's instinct rather than the philosopher's reasoned conviction. It would therefore be possible to find among his works passages, and even specific points of view, which accord ill with realism. Thus in the article entitled "Das Unbewusste," which he published in 1915, he suggests that we can assert the existence of our unconscious by means of an inference similar to that whereby we accept the presence of a conscious psychic life in other men. Such an argument leads to a secondary consciousness rather than to the unconscious in the strict sense. Freud therefore hurriedly invokes the aid of Kant, and compares the unconscious to the "thing in itself," which is very different from the phenomenal knowledge we possess of it. It therefore seems to us difficult to deduce from this article that Freud is plainly opposed to realism. It might also be pointed out that in his two schemata of the psychic apparatus Freud speaks of external sensation as though it were always conscious.¹ If he had been a true realist, how could he have failed to recognize the vitally important fact that external sensation is intrinsically unconscious, and only becomes conscious through a supplementary act? This argument would be of very great weight if Freud were a systematic metaphysician, but as we know, he is not—in fact, as a philosopher, he is all but incoherent.² This incoherence presents a troublesome obstacle, for it shows that the theory of knowledge is a region into which he cannot have dared often to venture. As we have said, Freud's realism is merely the scientist's instinct.

His realist orientation is very clearly exhibited in his conceptions of the unity of the ego. In the course of the present chapter we have shown that the objections to the ontological unity of the individual

¹ I. D., p. 497; E. I., p. 20.

² Frink has pointed out that it would be logical to recognize that external sensation begins with an unconscious phase, Frink. M. F., p. 29 (note).

were rooted in idealism, i.e. in the confusion between the ego and the ego's consciousness of itself. It is remarkable indeed to note that neither in Freud's works nor in those of his supporters do we find the showy cases of multiple personality which the Salpêtrière psychiatrists quoted with such suspicious frequency. Yet Freud had been a pupil of Charcot. This is at once explained when we realize that Freud always works on the realist plane, as is amply borne out by his method of investigation, which systematically substitutes the point of view of causality for that of consciousness. He attaches very little importance to the consciousness which the ego may or may not possess of the deep levels of its being. The latent elements exist and influence the superficial (so-called conscious) levels of the psychism. That is the primary certainty which makes possible the construction of an individual psychic semeiology. Every effect is a sign of its cause. The conscious psychism merely expresses the unconscious psychism whence it is derived. The psycho-analytical method of interpretation is absolutely inconceivable unless we begin by postulating an independent existence for the unity of the ego, whatever may happen to the consciousness of itself which that ego may or may not possess. In our examination of dreams we have defined the concept of *psychic expression*. We believe that the reader who has thoroughly grasped this concept has imbibed the essential dogma of psycho-analysis. Need we emphasize the fact that it is derived from the strictest realism?

Not only is the unity of the ego and the truth of realism demonstrated by the success of the method of inference from the conscious to the unconscious; the therapeutic process of *de-repression* also relies on the same two premises of unity and realism, and thereby confirms them. The purely inferential reconstruction of the unconscious genesis of his symptoms does not suffice to cure the patient. Curative psycho-analysis is not a dialectic. Its object is not to introduce from outside into the patient's psychism images which resemble his forgotten memories as closely as possible; those memories themselves must be intuitively recovered.¹ This point cannot be over-emphasized. The whole of the therapeutic method of psycho-analysis consists in a gradual filtration of the unconscious into the conscious, and an extension of the field governed by consciousness. It is now clear why Freud never strayed towards theories of dissociation of the personality. His curative process sufficed to guard him against this.

The logical implications of his point of view led Freud plainly to vindicate the existence of a causal influence of the psychic upon

¹ I. L., pp. 236-8, 364.

the organic. As is well known, this theory fell into great disfavour among the philosophers of the end of the nineteenth century. But Freud does not allow the opinions of philosophers to cause him the least concern; he tells us himself, in more than one passage, that their objections are not worth a shrug of the shoulders.¹ He also asserts, without a tremor, that mind influences matter, as the very term *conversion hysteria* denotes. It signifies in fact, in Freud's view, that psychic energy is converted into organic energy. This formula is so uncompromising that it defeats its own end, but it has the advantage of clearly showing the absolute incompatibility of Freud's doctrine with the metaphysics of parallelism.

Freud's disciples have followed his lead, and pressed the idea of the causal influence of the psychic upon the organic to its furthest limits. Some of them go so far as to utter the daring hypothesis of the psychogenic creation of organic disorders.² This is, of course, an extreme view, and many psycho-analysts would refuse to subscribe to it. But they all hold that the old-fashioned organicist orthodoxy needs revision, and that we must recognize a minimum action of the psychic upon the organic rather more substantial than that which the materialist tradition of medicine grudgingly allowed.³

Though primarily the explorer of the unconscious, Freud later became its theorist, so that it was quite natural that in studying the influence of the psychism on the organism, he should have laid particular stress on the unconscious part of the psychism. Does this mean to say that he denies all efficacy to consciousness, as has been so often alleged against him? The nature of his researches has not led him to pay much attention to the influence of the normal conscious psychism on the organism. Rather his whole method of psychotherapy implies the possibility of extending the sovereignty of consciousness to the domain of the unconscious. It has been stated over and over again that in Freud's view, man is guided by the unconscious. That is not false, but why should Freud's important restriction of it be forgotten? Why should only his theories of the ætiology of the neuroses be discussed, while his therapeutic method is passed over in silence? "As soon as the unconscious processes involved are made conscious, the symptoms must vanish."⁴ Can the physician who bases the whole of his method of treatment of the neuroses upon such a statement, be accused of failing to recognize the efficacy of consciousness?

¹ I. D., p. 561; A. S., p. 56.

² Cf. Hesnard and Laforgue, "Les processus d'auto-punition," in *Revue de psychanalyse*, vol. iv, No. 1, p. 84.

³ Cf. Deutsch, "De l'influence du psychisme sur la vie organique," in *Revue de psychanalyse*, vol. i, No. 1, pp. 105-19.

⁴ I. L., p. 236.

Freud's influence upon psychiatry and psychopathology is to be seen in a real resurrection of belief in the efficacy of the psychism. This is one of the main causes of the opposition against him, and in the unleashing of antagonism to psycho-analysis it has played as great a part—perhaps even a greater than that played by his sexual theories. The following quotation from Watson is a good illustration of the mortal blow which Freud's psychological realism deals to physiological materialism:

To the majority of psycho-pathologists and analysts *consciousness* is a real "force"—*something that can do something, something that can start up a physiological process, or check, inhibit, or down one already going on*. No one unless he ignores physics and the history of philosophy could hold this view. No psychologist to-day would like to be classed as believing in *interaction* (I think some of them do!) of which this is an expression. Until you can get the physician who deals with behaviour to face the physical fact that the only way you can get a billiard ball on the table in front of you to start moving—to go from a state of rest to a state of motion—is to strike it with a cue or to get another ball already in motion to strike it (or else have some other moving body hit it)—until you can get him to face the fact that if the ball is already in motion you cannot make it change its rate of motion or its direction unless you do one of these same things—you will never get a scientific view-point about psycho-pathological behaviour. The psycho-pathologists—most of them—*believe to-day that "conscious" processes can start the physiological ball rolling and then change its direction*. Much as I have maligned the introspectionists, they are not quite so naive in their concepts. Even James long ago expressed the view (although he did not stick to it in "will" and in "attention") that the only way you could "down" or change a bodily process was to start some other bodily process going. *If "mind" acts on body, then all physical laws are invalid*. This physical and metaphysical naiveté of the psycho-pathologist and analyst comes out in such expressions as "This conscious process inhibited this or that form of behaviour"; "the unconscious desire keeps him from doing so and so." Much of the confusion we have to-day dates back to Freud.¹

This extract from Watson gives a right idea of the importance of Freud's innovations. While physiological materialism had only idealism to face, it ran no risks. A philosophy which limits the psychic to the conscious is incapable of justifying the regulation of the bodily life by the soul. The Cartesian *cogito* ends in dissolving the composite unity of man. On the contrary, as soon as we postulate that the conscious is not the whole essence of the psychic, we

¹ Watson, *Behaviorism*, Kegan Paul, 1925, pp. 242-3.

are no longer compelled to limit to thought the operations performed by the soul. The soul can again become the life-principle. Freud has not deeply investigated the problem of the relations between body and soul, and so has no solution to suggest. But I believe that the metaphysical system which would most logically extend the results which Freud has reached would, on the whole, be of the Aristotelian type. The Viennese savant is not far from admitting that the psyche is the principle whereby we live, feel and think: 'Ἡ Ψυχὴ δὲ τοῦτο ᾧ ξῶμεν, καὶ αἰσθανόμεθα καὶ διανοούμεθα πρῶτως'¹

Whereas our views on the metaphysics of the unconscious are, generally speaking, in accordance with those of Freud, we do not think that the same can be said as far as the various types of consciousness are concerned. We have carefully distinguished proprioceptive sensations from sensory consciousness, and the latter from intellectual consciousness. It seems to us impossible to tell what would be Freud's attitude towards these distinctions. His curiosity has not led him to tackle the problems of classification upon which we have laid such emphasis. We could only reconstruct his thought in an entirely hypothetical form, and it would be better not to make the attempt. The considerations we have put forward on the various types of consciousness are foreign to the doctrinal edifice of Freudism: this seems to us the most probable conclusion.

We must now compare Freud's theories with those which we have advanced on the various types of unconscious.

It seems to us impossible to determine Freud's views on the problem of substance. As we have already observed, this question is of a purely metaphysical order, and lies beyond the scope of psycho-analysis. All that we can say is that Freud provides no arguments for those who deny the unity of the ego.

As far as the three levels of the unconscious are concerned*—innate tendencies, acquired modifications of innate tendencies, and acts proper—we believe ourselves to be in agreement with Freud. This distinction, moreover, belongs to the realm of common sense, and seems hard to dispute. Only a radical empiricist could reject innate tendencies. However great the importance which Freud assigns to acquired factors, he has never dreamt of denying the existence of innate elements.

¹ Aristotle, *De Anima*, 414, a 12.

Freud pays little attention to the deepest level of the cognitive unconscious—that of innate tendencies.

He does not profess to tackle the great dispute on the transcendence of reason over the sensory faculties, the senses proper, and the imagination. His general tendencies are plainly empiricist, as we have repeatedly stated in Volume I. Nevertheless it so happens that he has strikingly emphasized the originality of rational knowledge: let the reader refer to our exposition of the representation of relations, and especially of negation, in dreams. In *The Future of an Illusion*, Freud speaks of the primacy of the intellect in terms which are hardly compatible with empiricism.¹ These few observations must suffice here, since the last chapter is to be entirely devoted to the life of the spirit.

The second level of the cognitive unconscious, that of acquired modifications of innate tendencies, plays an absolutely primary role in psycho-analysis. All Freud's explanations involve reference to the unconscious traces left by antecedent psychic activity, and emphasize their efficiency. Here we are in agreement with him.

As far as the third level of the cognitive unconscious, that of acts, is concerned, we shall have to diverge from Freud on a rather important question. We have already said that Freud omitted to bring to the fore the intrinsic unconsciousness of extraceptive sensation, but we do not think that he intends to deny it. He does not seem to have perceived the serious difficulty raised by the unconscious quality of certain proprioceptive sensations. A supporter of the plurality of centres of consciousness would here invoke his favourite theory, but Freud is an uncompromising protagonist of the strict unconscious. The concept of organoceptive sensation, whereby we attempted to obviate this difficulty, has not been explicitly deduced by Freud, but it seems to us to be in perfect harmony with his views. As far as novel unconscious images are concerned, we have accepted their possibility while adding that their actual existence could not be logically demonstrated. Freud seems to be less cautious. As for rational operations, it is clear that the problem of the distinction between concepts and judgments would not be of much interest to Freud. He would have no hesitation in asserting that unconscious concepts, judgments and reasoning processes exist, so long as he had not to define the characteristics of each of these operations. It is here, as we said above, that we part company from him. We freely recognize that novel unconscious concepts may exist, although we do not think that the demonstration of their existence is possible. But we categorically deny that novel unconscious judgments can

¹ F. I., pp. 88-98.

exist. Freud holds, on the contrary, "that the most complex mental operations are possible without the co-operation of consciousness."¹ At first sight his theory seems radically opposed to ours. But on closer inspection, we shall find that whereas we are attaching its strict meaning to the word "judgment," Freud is probably not doing so. We have adopted Delacroix's interpretation: "The discoveries suggested to us by the unconscious are already very elaborate and very near judgment, so that the judgment is formulated immediately and without difficulty, and appears to have been already formed in the unconscious."² This explanation seems to us to account satisfactorily for the phenomena of scientific inspiration which Delacroix has in mind as well as for the oneiric or neurotic phenomena which interest Freud more or less exclusively. Although the disagreement between Freud's thesis and our own on the question of judgment (and, let us add, of reasoning) is very important on the logical-metaphysical plane, it is reduced to very little (and almost disappears altogether) on the purely scientific plane.

On the affective unconscious, the agreement between Freud's ideas and our own is very incomplete. At the first level (that of innate tendencies) we make a radical distinction between instinctivity and will. It is clearly where the will is concerned that we cannot accept the Freudian point of view. Freud's whole work is, if not a negation, at least a systematic putting-aside of the role of the will. He indeed recognizes a certain regulation of the instincts by rational conscious apprehension (this actually forms the basis of his therapeutic method), but he passes over in silence or rarely alludes to the role of voluntary effort in the domination of the instincts.

The second level of the affective unconscious (that of acquired modifications of innate tendencies) is equally if not more important, from the psycho-analytical point of view, than the corresponding level of the cognitive unconscious. We are fully agreed with Freud on its dynamic role, though of course we reserve our distinction between instinctive and volitional traces.

In our investigation of what should form the third level of the affective unconscious (affective operations proper), we categorically denied their actual and even their possible existence. Freud also rejects these unconscious affective states in many passages, and has added the following note to his follower Saussure's criticism of his theory in this respect: "I simply mean to say that we cannot speak

¹ I. D., p. 545.

² Delacroix, "Les opérations intellectuelles" in Georges Dumas, T. P., vol. ii, p. 151.

of unconscious feelings in the same way as we might speak of unconscious images. The conscious, in my view, is simply the act of perception. An image may exist even if it is not perceived, whereas feeling consists in its actual perception. This observation, however, does not deprive us of the right to speak of unconscious feelings, so long as we remember that the term is an abbreviation."¹ We agree with Freud in maintaining that pleasure and pain are essentially conscious. Affectivity may be unconscious at the stage either of inactive or of active latency, but not at the stage of actuality proper, whereas certain cognitive functions may be unconscious even at the stage of strict actuality. In his critique, Dr. de Saussure maintains that Freud's point of view would end by recognizing only possibilities outside the conscious.² This objection is invalid for two reasons. Firstly, as we have explained in detail above, the case of cognition is radically different from that of affectivity—a fact which Freud has clearly perceived, although his statements may be disputable in strict philosophy. Secondly, Saussure confuses possibility with potentiality. The former belongs to the purely logical, the latter to the ontological order. The state of potentiality is more than possibility and less than actuality. Dr. de Saussure's thesis appeared in 1922. In a short essay entitled *The Ego and the Id*, published in 1923, Freud returned to the question of unconscious affective states. His language is rather obscure, and a superficial reading might give one the impression that he had changed his mind. Closer inspection shows that Freud has simply emphasized the idea that before pain itself is produced, there is "something" which corresponds to it. But he maintains that the existence of pain depends upon conscious perception.³

This idea of a "something" which is not yet pain—of a "pre-pain," we might say—seems to us very interesting. It would seem to deserve further study. It is perhaps in this direction that we should seek the explanation of the phenomena we discussed above which seemed to prove the existence of unconscious affective sensations. The most frequent instance is that in which a painful sensation, which only becomes conscious on awaking, evokes dream-images in which the pain is attributed to someone other than the dreamer. Could we not, to explain dreams of this type, have recourse to an organoceptive sensation in the affected region followed by pre-pain? The psychic whole thus constituted would be the agent inducing dream-imagery. We shall certainly have to face the objection that the psychic whole to which we appeal is composed of two fictitious

¹ de Saussure, M. P., p. 17, note 1.

² de Saussure, M. P., p. 16.

³ E. I., p. 25.

entities invented solely to serve our own purposes. To this we shall answer that the concept of cause is itself an entity. A final choice must be made between the strictly positivist and the metaphysical point of view. If we claim to be strict positivists, we must simply say "frequent" and "rare," denying ourselves the use of the words "necessary" and "accidental"—renouncing, in short, the right to formulate a single universal law outside pure mathematics, as Stuart Mill has so clearly shown. We do not believe that any positivist could leave the field undefeated. The most hardened phenomenalist must sooner or later be caught red-handed juggling with entities. In these circumstances, the premises we have accepted are those of simple logic. On the one hand, the philosophical analysis of pleasure and pain leads us to admit that they are intrinsically and essentially conscious; on the other, we find psychic products whose normal explanation would involve unconscious painful sensations; it follows necessarily that we must either invoke forgotten conscious sensation, or something like "pre-pain." We beg those who may be tempted to laugh at this entity to refer once more to those which they themselves employ. It is certainly easy to ridicule the narcotic virtue of opium, but when all is said and done, narcotic virtues afford the only explanation. Why does a given substance produce a given effect? We may analyse the substance; dissect it as minutely as we may, the fatal question will simply arise again, as many times as we have new elements. Modern chemists recognize a larger number of narcotic virtues than did the physicians of Molière's day,¹ but they are smaller. This alone constitutes scientific progress.

Although we are in agreement with Freud in rejecting unconscious affective operations, we are no longer so when it comes to the classification of conscious affective operations. Freud would seem to accept our distinction between affective sensations and emotions, because he rejects the theory of James-Lange,² but we do not know whether he would accept or reject our detailed explanations. In any case, we can have no understanding with Freud on the question of the spiritual feelings and free choices, both of which we ascribe to the will. The will is the most ill-treated psychic faculty in Freud's work. He seems determined to refuse to distinguish between spiritual experiences and emotions proper, and categorically to deny the existence of free choices. Here our ways lie apart.

¹ Let the reader recall the immunisines, agglutinines, precipitines and other "phenomenines," as Le Dantec used to call them! (D.)

² I. L., p. 331.

CHAPTER II

PSYCHIC DYNAMISM

In Volume I we emphasized the essentially dynamic quality of Freud's psychology at some length, and indicated the important differences which distinguish Freud's dynamism from Janet's. We must now investigate the reliability of the fundamental assumptions of the Freudian dynamic theory, and to this end we shall employ the objective method. By a fortunate coincidence, it so happens that many of Freud's results may be verified by means of the method of conditioned reflexes, which has been systematically studied by Pavlov. This process has the great advantage of shortening endless discussions. Psychological controversy may be indefinitely prolonged; a well-carried-out and correctly-interpreted physiological experiment cannot but command acceptance.¹ But the question of psychic dynamism is not exhausted by a study of Pavlov's results and their comparison with those of Freud. We should still have to examine the allied problems of the disguise and of the order of comparative importance of the psychological functions, an undertaking which would be fruitless unless the controversy on the value of the psycho-analytical methods of exploring the unconscious has first been decided. Apparently, too, the concept of an order of comparative importance of the psychological functions is more or less closely linked to metaphysical theories. Discussions of this kind will be more in place later on in this work. This chapter will consist therefore of only two sections: (i) Pavlov's theory of psychic dynamism, (ii) A comparison of Pavlov's and Freud's results.

I. Pavlov's Theory of Psychic Dynamism

Pavlov calls the reflex commonly studied in physiology "absolute reflex," and contrasts it with the "conditioned reflex."² Every time a dog is given meat, secretion of saliva takes place: this is an "absolute," "innate," or "specific" reflex. But if a whistle is blown a few

¹ Pavlov, C. R., pp. 6-7; Pavlov, L. C. R., pp. 38-9.

² For a general view of Pavlov's results, one may usefully refer to Meignan's two articles on "Conditioned Reflexes," published in *L'Encéphale*, November 1932, pp. 786-824, December 1932, pp. 857-84.

seconds before each time that the dog is fed, it is found, after a few experiments, that the sound of the whistle alone has acquired the power of stimulating salivation: here we are dealing with a "conditioned," "acquired," or "individual" reflex.

Inhibition is a particularly important phenomenon in reflexology. Pavlov distinguishes the two types of internal and external inhibition,¹ each of which is capable of abolishing both absolute and conditioned reflexes. Let us first define the inhibition of absolute reflexes. Internal inhibition is said to take place when the only effect of the stimulus is an arrested movement. This is exemplified by the many insects which become immobile as soon as they are touched. External inhibition is said to take place when the effect of the stimulus is to produce a movement which is incompatible with another movement already taking place and arrests it. Pavlov quotes as an example, the newly-hatched chick, "which manifests straightway a pecking reflex in response to the visual stimulus of small objects or patches of light and shade. If, however, a strongly irritant and injurious substance is taken up, the pecking reflex becomes inhibited immediately, and is replaced by a defence-reflex leading to the rejection of the irritating substance."² We observe that internal inhibition is direct: a positive cause directly produces a negative effect. External inhibition, on the contrary, is indirect: a positive cause directly produces a positive effect which counteracts and finally arrests another positive effect already in action; the negative result is only obtained indirectly, through the intermediary influence of a positive effect. Logicians would compare internal inhibition to the opposition of contradiction (e.g. between white and not-white), and external inhibition to the opposition of contrariety (e.g. between white and black).

Having defined the concepts of absolute and conditioned reflex, of internal and external inhibition, we can pass on to examine the conditions of the establishment of conditioned reflexes. We must begin by indicating a rule which has no exceptions whatever: that the conditioned stimulus must precede the absolute stimulus in time. If it follows it, even by a single second, it is impossible to form the conditioned reflex.³ Conditioned stimuli may be of various kinds. As we have seen in Volume I, conditioned reflexes may be set up even by painful stimuli⁴—a point to which we shall return when dealing with experimental neuroses. Weak stimuli may be used within certain limits laid down by the animal's receptive apparatus.⁵ This leads logically to the attempt to decompose stimuli into their

¹ Pavlov, C. R., p. 43. ² Pavlov, C. R., p. 44. ³ Pavlov, C. R., p. 27.

⁴ Pavlov, C. R., pp. 29-31.

⁵ Pavlov, C. R., p. 38.

component elements, an attempt which Pavlov has successfully followed out in two directions, the former corresponding to association by contiguity, the latter to association by resemblance. The former involves the attempt to sub-divide the stimuli spatially; the latter, a variation in their intensity. Both intensive and extensive modifications may become conditioned stimuli.¹ This formula is true in its strictest sense: not only are the modified stimuli effective, but the modifying processes themselves. The interruption or the weakening of a sound or a light may become a conditioned stimulus. We arrive, therefore, at the following important formula: "Not only can the appearance of some external agency act as a conditioned stimulus, but its disappearance also, or the rapid weakening of its strength."² The traces left by perceptible stimuli are as effective as the stimuli themselves. If we make an animal hear a sound, and three minutes after it has ceased offer him the absolute stimulus, it will be found, after the experiment has been repeated a certain number of times, that salivation takes place without the intervention of the absolute stimulus, three minutes after the end of the conditioned stimulus.³ Pavlov suggests as an interpretation of this event that here the true conditioned stimulus is not the sound, but the trace it leaves at the level of the central nervous system. Trace-reflexes led Pavlov to inquire whether time itself could not become a conditioned stimulus. If a dog is fed every half-hour, it is found, after some experiments, that salivation occurs automatically about thirty minutes (to within a difference of no more than a minute or two) after the preceding meal. For a better illustration of the part played by time, the experiment may be made slightly more complicated. Some visual or auditory stimulus is operated every half-hour when the animal is fed. This excitant, as well as time, contributes to the formation of the conditioned stimulus. If the former is operated after ten minutes, slight salivation is produced; after twenty minutes, salivation is stronger, but it does not attain its maximum till the thirtieth minute. But if this stimulus is operated too often outside its regular periodicity, and without reinforcement by means of the absolute stimulus, it loses all its effect when used separately, *even at the twenty-ninth minute*.⁴ In order to explain these facts, Pavlov admits that here the conditioned stimulus is not the entity time, but the state of the trace at the end of half an hour. Time-reflexes are merely long-delayed trace-reflexes.⁵

All the foregoing instances have involved merely primary conditioned reflexes, i.e. those formed directly by means of absolute

¹ Pavlov, C. R., pp. 38-9.

² Pavlov, C. R., p. 39.

³ Pavlov, C. R., p. 39. ⁴ Pavlov C. R., p. 41. ⁵ Pavlov, C. R., p. 43.

stimuli. Secondary conditioned reflexes may be formed by means of already well-established conditioned stimuli, but the action of the stimulus intended to form a secondary conditioned reflex must be interrupted *before* the action of the already formed primary conditioned stimulus begins, otherwise there would take place a phenomenon which we shall examine later—conditioned inhibition.¹ Where food reflexes are concerned, one can go no further than the secondary conditioned reflex, but in the case of defence-reflexes Pavlov has succeeded in forming tertiary conditioned reflexes.²

As we have already stated, conditioned reflexes are just as subject to inhibition as absolute reflexes. The simplest instance is that of external inhibition. Let us take the case of a dog in which a conditioned reflex has already been formed; if any one of the usual conditions of the laboratory happens to be modified, if the lighting is altered, if a sound is heard or a draught comes through the door, the animal at once reacts with an orientation-reflex. It pricks up its ears, looks round, and sniffs. These reactions more or less completely inhibit the salivary reflex.³

The internal, unlike the external, inhibition of conditioned reflexes, is a highly complicated process. Pavlov distinguishes four varieties of it: extinction, conditioned inhibition, retardation, and inhibition by differentiation.⁴ Later we shall see that there is yet another variety of internal inhibition, so important that we must study it separately, viz. sleep.

If a salivary conditioned reflex has been formed, and the conditioned stimulus is operated several times without being followed by the absolute stimulus, it is found that the conditioned reflex grows weaker and finally disappears.⁵ This is known as extinction. It is of primary importance to emphasize its dynamic quality. Extinction is not a form of destruction, for if left to itself, the extinguished reflex recovers its activity after a varying length of time.⁶ But if extinction is not an instance of destruction proper, might it not be one of "wear and tear," of fatigue? If there were any fatigue, it would affect either the secretory or the nervous element. The hypothesis of fatigue of the secretory element must be eliminated, for when the conditioned stimulus is reinforced by the absolute stimulus, an enormous quantity of saliva is obtained, no matter how often the experiment is repeated.⁷ There remains the hypothesis of fatigue of the nervous element, which Pavlov likewise excludes, justifying

¹ Pavlov, C. R., p. 33.

³ Pavlov, C. R., p. 45.

⁵ Pavlov, C. R., pp. 48–67.

⁷ Pavlov, C. R., p. 60.

² Pavlov, C. R., pp. 33–5.

⁴ Pavlov, L. C. R., pp. 238–40.

⁶ Pavlov, C. R., p. 58.

his interpretation by the following experiment. Given a complex conditioned stimulus, composed of the two excitants A and B. Excitant A is the stronger, and produces a certain amount of salivation when used separately. Excitant B is so weak as to be completely masked by excitant A, i.e. when used separately, it produces no salivation at all. Let stimulus B be treated as though to obtain its extinction, i.e. without reinforcement by the addition of the absolute stimulus. Apparently one is working simply in the void; for how can a completely unproductive agent be extinguished? Yet if later experiments are made with the strong stimulus A, or even with the complex stimulus AB, both are found to be extinguished. We are therefore forced to admit that stimulus B really has been extinguished, since the process of its extinction has led to that of A and AB.¹ Granted that this is so, how could one maintain that extinction is due to fatigue of the nervous element? That hypothesis crumbles before the observation of the apparently strange fact that it is possible to extinguish even an excitant which produces no positive effect.² Extinction is therefore neither a destruction nor a fatigue, but an essentially dynamic phenomenon.

The foregoing experiment brings to our notice what Pavlov calls silent extinction,³ an extremely remarkable concept which does not seem to admit of interpretation from the standpoint of static phenomenalism. In order to define its significance, we shall proceed to indicate Pavlov's method of estimating the depth of extinction when it is prolonged beyond the absence of salivation. If the conditioned agent is still exhibited to the animal, after it has ceased to produce salivation unreinforced by the absolute agent, it is found that the spontaneous re-establishment of the extinguished reflex takes more time than if the experiment had been concluded as soon as salivation ceased. Here we have a first means of determining the depth of extinction.⁴ But by the side of the spontaneous restoration by time of conditioned reflexes there also exists an artificial restorative. Given a conditioned reflex in process of extinction: if the absolute stimulus is used as well as the extinguished conditioned stimulus, the conditioned reflex is more quickly restored. If the extinction has been prolonged beyond the absence of salivation, it is found that the number of reinforcements by the absolute stimulus necessary to revive the extinguished conditioned reflex is larger than would have been necessary if the process of extinction had been concluded as soon as salivation ceased. Here we have a second means of determining the depth of extinction.⁵

¹ Pavlov, C. R., p. 57. ² Pavlov, C. R., p. 60. ³ Pavlov, C. R., p. 57.

⁴ Pavlov, C. R., p. 58. ⁵ Pavlov, C. R., p. 59.

The second variety of internal inhibition is conditioned inhibition.¹ Given a well-developed conditioned stimulus A, to which is added a new excitant B. The combination AB is operated without being reinforced by the action of the absolute stimulus, and we find that its salivary effect diminishes to nil, while that of A, which has *been continuously reinforced by the absolute stimulus, persists.*² One might at first be tempted to confuse this phenomenon with external inhibition due to orientation-reflex. But the latter is diminished in time, whereas the inhibition we are dealing with here is increased. An interesting variety of conditioned inhibition, which for lack of space we can do no more than mention here, is that of consecutive inhibition.³ In order to illustrate the dynamic quality of conditioned inhibition, it is enough to note that taken separately the supplementary excitant B produces no effect, but that its inhibitory role is clearly manifested in conjunction with other conditioned stimuli with which it has not yet been used.⁴

The third variety of internal inhibition is that of retardation.⁵ We have seen that in order to form a conditioned reflex, the conditioned stimulus must be applied before the absolute stimulus. The interval between the beginning of the conditioned stimulus and the addition of the absolute stimulus may vary from a few minutes to a few seconds. If we first take the example of a short interval, from 1 to 5 seconds, we find that on the development of the conditioned reflex, saliva will appear very soon after the beginning of the conditioned stimulus. As the interval is increased, salivation will be longer delayed.⁶ This is what Pavlov describes as "retardation." In order to show that this is a dynamic process, and not a phenomenon of "wear and tear" or of fatigue, we have simply to begin the experiment with a very short interval; the conditioned reaction follows very rapidly. As soon as it is established, the interval is suddenly and considerably increased. At first the conditioned reaction almost disappears, then salivation takes place at about the moment when the absolute stimulus is added.⁷ If during the inactive phase some foreign stimulus is operated, salivation takes place at once. This may be explained as follows: the foreign stimulus provokes the orientation-reflex, which acts through external inhibition upon the internal inhibition of retardation; the two processes neutralize each other, hence the appearance of saliva through disinhibition.⁸ Retardation is therefore a true dynamic process.

¹ Pavlov, C. R., pp. 68-87.

³ Pavlov, C. R., p. 77.

⁵ Pavlov, C. R., pp. 88-109.

⁷ Pavlov, C. R., p. 88.

² Pavlov, C. R., p. 68.

⁴ Pavlov, C. R., pp. 74-5.

⁶ Pavlov, C. R., p. 88.

⁸ Pavlov, C. R., pp. 92-4.

The fourth variety of internal inhibition is inhibition by differentiation.¹ If a conditioned stimulus (e.g. a note of 1,000 vibrations per second) is developed, it is found that many other notes also acquire the same conditioning faculty. This faculty becomes less as their vibration-ratio varies, in either an upwards or downwards direction, from that of the note chosen.² We observe that a conditioned reflex tends naturally to become generalized. How may it be specialized? One might imagine that the frequent repetition of a well-defined conditioned stimulus, with reinforcement by the absolute stimulus, is enough to produce specialization. This is by no means the case. Specialization can only be obtained by operating stimuli closely akin to the conditioned stimulus, without reinforcement by the absolute stimulus. These excitants quite soon cease to provoke salivation.³ This is what Pavlov calls "inhibition by differentiation." It is obvious that conditioned inhibition and inhibition by differentiation are closely allied processes. The difference between them lies simply in the fact that conditioned inhibition involves analysis of a spatial whole, of an extensive magnitude, whereas inhibition by differentiation involves analysis of a logical whole, of an intensive magnitude. Without using this philosophical language, Pavlov develops exactly the same idea in showing that inhibition by differentiation involves a "general part" and a "special part," corresponding to the two elements present in conditioned inhibition.⁴

Our study of the four varieties of internal inhibition has brought to our notice the analytical and synthetical activity of the cerebral hemispheres. Pavlov, still faithful to his objective view, calls the sense-organs "analysers."⁵ We observe that conditioned reflexes enable us to determine, with perfect exactness, the absolute and differential limits of the senses of sight and hearing. Pavlov has been able to ascertain that colour-shades, chemically reproduced but indiscernible to the human eye, even by direct comparison, were plainly differentiated by dogs.⁶ He has likewise investigated the differentiation of geometrical figures and of the intensity of sounds.⁷ As far as synthesis is concerned, it is clear that it is strikingly exemplified in the formation of the conditioned reflex itself. But Pavlov has gone even further. He has formed complex conditioned stimuli by means of various excitants affecting the same or different senses.⁸ These complex stimuli are either simultaneous or successive. Thus for example the complex stimulus SKZ, composed of a visual

¹ Pavlov, C. R., pp. 110-30.

² Pavlov, C. R., p. 116.

³ Pavlov, C. R., p. 110.

⁴ Pavlov, C. R., pp. 133-5.

⁵ Pavlov, C. R., p. 113.

⁶ Pavlov, C. R., p. 117.

⁷ Pavlov, C. R., p. 132.

⁸ Pavlov, C. R., pp. 141 et seq.

stimulus S, a tactile stimulus K, and an auditory stimulus Z, may provoke salivation, whereas the inverse combination ZKS does not.¹ In another experiment, the combination: whistle, plus high note, plus low note, plus bell, has a positive action, whereas the combination: *whistle, plus low note, plus high note, plus bell, is inhibitory.*² This last example shows how deep an insight into the psychic activity of animals is afforded by the method of conditioned reflexes.

The generalization and specialization of conditioned reflexes which we mentioned above when dealing with inhibition by differentiation are permanent states rather than variable processes. There do, however, exist fluctuating generalization and specialization of conditioned reflexes, which Pavlov calls irradiation and concentration. The following is the relevant experiment: Five small apparatuses for mechanical excitation of the skin are placed along a dog's hind leg. The lowest of these is to be used for inhibition, the others for positive effect. For this purpose, a positive reflex is developed at one of these points. Owing to the primary generalization with which we are already familiar, the other points are all more or less active. All four of the higher points are then stimulated, the conditioned stimulus being reinforced by the absolute stimulus so as to equalize them, whereas the lowest point is stimulated with the conditioned stimulus isolated, so as to bring about inhibition. Once this has been achieved, the experiment proper begins. Any three positive points are stimulated; it is found that they produce the same number of drops of saliva. Then the positive points are examined one after the other, the inhibitory point having been previously operated three times in each case. We now find that they no longer produce an equal effect; the nearer they stand to the inhibitor, the greater their loss in power. "Irradiation" of the inhibition is said to have taken place. But this irradiation is only temporary. If the positive points are tested, without operating the negative point, at increasingly long intervals of time from the beginning of the process of irradiation, the latter is found to be reversed. Fairly extensive inhibition is relaxed first on the further points, then on the nearer, and is finally concentrated on its starting-point.³ The foregoing experiment is concerned with inhibition by differentiation; similar experiments show that extinction and conditioned inhibition are likewise subject to irradiation and concentration.⁴ The latter may be studied not only in the domain of a single analyser (e.g. the cutaneous analyser, as in the foregoing example), but in those of several analysers. If in the case of a dog with two separate conditioned stimuli, the one auditory and the

¹ Pavlov, C. R., p. 145.

² Pavlov, C. R., pp. 146-7.

³ Pavlov, C. R., pp. 152-6.

⁴ Pavlov, C. R., pp. 156-66.

other visual, we induce inhibition by differentiation of the auditory stimulus, we find that the visual stimulus is also affected.¹ Similar experiments have been made on extinction, retardation, and conditioned inhibition.² We have hitherto only discussed irradiation and concentration in connection with the various kinds of inhibition; they are also to be found in the case of excitation, but Pavlov has not paid so much attention to them.³

The processes of excitation and inhibition are capable not only of irradiation and concentration, but of mutual provocation. This is what Pavlov calls induction.⁴ When the process of excitation brings about reinforced inhibition, negative induction takes place. But when inhibition provokes reinforced excitation, positive induction takes place.⁵ Negative induction so closely resembles external inhibition that Pavlov has been led to advance the theory that they are identical.⁶

I shall not follow Pavlov's extremely interesting exposition of the combination of the processes of irradiation and concentration with those of induction. I am studying Pavlov for Freud's sake rather than for his own. Leaving aside, therefore, the question of the cerebral mosaic, I shall pass at once to the examination of the relations between sleep and inhibition.

The four varieties of internal inhibition which we have discussed exhibit a common characteristic: they are produced in the absence of reinforcement by the absolute stimulus. But in the course of later investigations, Pavlov ascertained that internal inhibition was produced even in the presence of that reinforcement, although much more slowly.⁷ We find that after prolonged stimulation, a cortical cell gradually passes into a state of inhibition. Pavlov has confirmed this law by a number of different experiments into which we need not enter in detail. His conclusion is that internal inhibition is a protective process intended to prevent "wear and tear" of the nerve-cells. It is a dynamic phenomenon, and not simply an exhaustion; we may, if we like, call it a defence-reaction.⁸ What is true of a single cortical cell is true of the cortex as a whole. Pavlov has thus come to regard normal sleep as an internal inhibition, generalized over the whole cortex, and diffused as far as the mesencephalon.⁹ He thus came to agree, as Lhermitte has so clearly explained, with Claparède's biological theory of sleep.¹⁰ Starting from instinct, from the living being's total reaction, the Swiss psychologist suggested

¹ Pavlov, C. R., pp. 167-9.

³ Pavlov, C. R., pp. 177-87.

⁵ Pavlov, C. R., p. 188.

⁷ Pavlov, C. R., p. 230.

⁹ Pavlov, C. R., p. 253.

² Pavlov, C. R., pp. 170-4.

⁴ Pavlov, C. R., p. 188.

⁶ Pavlov, C. R., pp. 201-3.

⁸ Pavlov, C. R., p. 249.

¹⁰ Lhermitte, S., pp. 49-64.

that sleep should be regarded as a positive function, a defence-reaction, rather than explained by an intoxication, as writers of mechanist tendencies preferred. Starting from the reflex, to the internal inhibition of which he has paid principal attention, and remarking the irradiation of that inhibition, the Russian physiologist has been logically induced to regard sleep as a generalized internal inhibition. Claparède's theory was a brilliant psycho-biological anticipation, to which Pavlov's experiments have added a confirmation which is almost as good as demonstrative proof. Pavlov's results illustrate the dynamic quality of sleep with startling clarity.

The need of sleep [writes Lhermitte] makes itself felt long before cerebral exhaustion is reached. All the evidence goes to show that the need of sleep precedes exhaustion. This is a vitally important fact, for it raises the question whether sleep is not quite simply a defence-function.

The quality of anticipation which sleep possesses is itself already a common, original characteristic exhibited by all forms of defence-reactions. We are familiar with the latter; are they not all, in fact, primarily marked by the priority of an activity over the phenomenon which has to be avoided because it is more or less harmful? If some intoxicant plays a part in sleep, as we gather from the experiments in insomnia carried out by several writers such as Manaccine, Pieron, and Kleitmann, our experience of everyday life and our observation of animals teaches us that sleep appears long before we can ascertain the slightest effect of intoxication. If it were a case of a crude physico-chemical phenomenon, the intensity of the effect would vary directly with the magnitude of the cause; on the contrary, sleep shows us, by the real independence between the nature and magnitude of the stimuli and the reaction they produce, that it belongs to the group of active vital phenomena.¹

There are clearly an infinite number of intermediate states between the inhibition of a reflex and the general inhibition of sleep. Pavlov has made a careful study of the transitional stages between the waking state and complete sleep. In the preceding chapter, we have already had occasion to mention that this investigation led him to reinstate human hypnosis.² Every possible objection has been voiced against hypnotic catalepsy. Now Pavlov shows that catalepsy *always* occurs in dogs during the passage from wakefulness to sleep.³ Hypnotic catalepsy is therefore identical with catalepsy preceding sleep, of which it is simply the extension.

By the monotonous repetition of conditioned stimuli in an animal

¹ Lhermitte, S., pp. 57-8.

² Pavlov, C. R., pp. 404-11.

³ Pavlov, C. R., pp. 265-6.

[writes Lhermitte] it is possible, when the conditions are favourable, to bring about a state of inhibition which appears to be strictly limited to the surface of the hemisphere. The animal's reactions to stimuli are very feeble; he is passive and motionless. Moreover the experimenter can alter the position of the animal's legs without protest from the latter, who often seems to be in a cataleptic state, a fact which is borne out by his remaining, for an almost indefinite length of time, in whatever attitude he is placed. In this state, as Pavlov writes, hemispherical activity is as wholly absent as in common sleep, but the animal remains upright, and stands erect for minutes or hours at a time without needing any support. If the position of its legs is altered, they stay in the new position. This is a case of true hypnotic catalepsy, and affords evidence that the activity of the tonus centres persists. All those who are interested in the problem of sleep should bear in mind this cataleptic state, which is by no means peculiar to hypnosis, or at least does not belong to it exclusively. Indeed, not only can this catalepsy of sleep be stimulated experimentally in animals, thus indicating their hemispherical inhibition, but it is to be observed in men, either in the somnolent phase, i.e. at the first stage of falling asleep, or in the last phase of sleep, during the short space of time which divides sleep from complete wakefulness, in the form of the *waking catalepsy* which we (Lhermitte and Dupont) have described.¹

If hypnotic catalepsy is simply the extension of the catalepsy of falling asleep or awakening, what remains of the theory of those who regard hypnotic sleep as a simulation? If hypnosis were a simulation, normal sleep would be so too.

We have given a fairly detailed account of Pavlov's conclusions about hypnosis and sleep, with the object of dismissing an objection which is sometimes adduced against psycho-analysis. The latter is, as we know, the child of hypnosis. Freud's first method of exploring his patients' unconscious was by hypnotizing them; he did not invent an original technique until later. A certain number of writers have exploited the complete discredit into which hypnosis fell in France as an argument against psycho-analysis. To this we might simply reply that psycho-analysis is distinct from hypnosis, and that therefore the former is not necessarily involved in the overthrow of the latter. But this reply looks rather like an evasion. The true solution of the difficulty is derived from Pavlov's works, the formula which we have stated above: hypnosis and sleep are merely variants of a single fundamental process—internal inhibition.²

¹ Lhermitte, S., pp. 75-6.

² Readers who fight shy of Pavlov's long work, and who are interested in the problem of sleep, will find an excellent summary of Pavlov's ideas in Meignan's article, "Sommeil et Reflectivité conditionnelle," in *L'Encéphale*, March 1933, pp. 197-230.

Whereas Pavlov's theory of hypnosis is indirectly related to psycho-analysis, his researches in the direction of experimental neuroses are in touch with the most fundamental features of Freud's work. In Volume I we have already given an account of one of Pavlov's experiments on this subject. We must now take up the question again in detail with an ultimate view to comparing Pavlov's results with Freud's.

The animal neuroses which Pavlov has studied may be divided into two large groups. The former comprises disorders due to shock produced by a strong stimulus: these may be compared to the traumatic neuroses in man.¹ Pavlov quotes as an example the dogs which were saved with great difficulty from the Leningrad floods on 23 September 1924. Cases of this kind offer very little of psycho-analytical interest.

The second group is composed of the neuroses resulting from the clash of two antagonistic psychic processes. This group may in turn be subdivided according as the strife is between two incompatible instincts, or between the stimulus and internal inhibition.

In Volume I we described the basic experiment of clash between instincts. Food is offered to a dog, and at the same time an electric shock administered to a spot on his skin. In itself, the electric shock would produce a retreat- or defence-reaction. But through association with the offer of food, it ends by losing its capacity of provoking defence-reaction, and acquires that of provoking salivation. We may say that there takes place inhibition of the defence-instinct through a conditioned reflex relating to the nutritional instinct. But the balance thus obtained is unstable. If the electric shock is applied at a new spot, the balance is destroyed, the shock no longer provokes salivation, but arouses violent defence-manifestations; the dog becomes far more restless and excited than he had ever been before.² In von Monakow's language, we should say that there occurs over-compensation and extension of the reflexogenous zone;³ in Freud's, that there occurs return of the repressed following a missed repression.

The strife between the stimulus and internal inhibition is clearly discernible when we reach the threshold of inhibition by differentiation. Given a dog in whom there has been established a positive conditioned reflex in response to a luminous circle. If he is shown an ellipse whose larger axis is equal to the diameter of the circle, and whose axis-ratio is $1/2$, at first he produces saliva. But since the

¹ Pavlov, C. R., pp. 312-19, 397; Pavlov, L. C. R., p. 344.

² Pavlov, C. R., p. 290; Pavlov, L. C. R., pp. 341-2.

³ von Monakow and Mourgue, I. B. N., p. 275.

exhibition of the circle is accompanied by the offer of food, whereas that of the ellipse is not, the dog soon comes to distinguish the circle from the ellipse. The experiment is continued with ellipses whose axis-ratio is successively $2/3$, $3/4$, $4/5$, $5/6$, $6/7$, $7/8$, and it is found that the dog still contrives to differentiate between them and the circle. But when an axis-ratio of $8/9$ is reached, the balance between the stimulus for the circle and the inhibition by differentiation for the ellipse is destroyed. The dog becomes nervous, whines on the stand, twists and turns, snaps at the apparatus, and we find that even the differentiation of $1/2$ has disappeared.¹ We might in the same way examine the struggle between the stimulus and delay-inhibition² or any of the other varieties of internal inhibition, but this is not necessary for our purpose. Pavlov himself has drawn the only conclusion which is *important from our point of view*: "It becomes clear on considering all the pathological cases so far described, that the underlying cause of their development is in every instance the same. Broadly we can regard these disturbances as due to a conflict between the processes of excitation and inhibition which the cortex finds difficult to resolve."³

The liberation of so far inhibited tendencies is to be found in sleep as well as in experimental neuroses. Understanding of the passages from Pavlov which we are about to quote in support of this statement depends upon a knowledge of the meaning of two technical expressions used by Pavlov which we have not yet had occasion to mention. Among the hypnotic phases which occur between waking and sleeping, there is one characterized by the fact that strong stimuli produce a weak effect and *vice versa*. Pavlov calls this the paradoxical phase.⁴ Another hypnotic phase is characterized by a similar event: stimuli with a positive effect become either wholly or entirely ineffective, whereas stimuli with an inhibitory effect produce a positive effect. Here Pavlov speaks of ultra-paradoxical phase.⁵ Granted these definitions, Pavlov believes that the existence of paradoxical states enables us to

understand the frequent fact that in the drowsy state of the animal an apparently spontaneous salivary secretion sets in, which is absent in the waking state. The explanation consists in this—that at the beginning of the elaboration of the conditioned reflexes of a given animal many accessory stimuli, indeed the whole *entourage* of the laboratory, become conditionally connected with the food centre, but later all these accessory stimuli are inhibited, owing to the adapta-

¹ Pavlov, C. R., pp. 291–2; Pavlov, L. C. R., p. 342.

² Pavlov, C. R., pp. 293–4; Pavlov, L. C. R., p. 343.

³ Pavlov, C. R., p. 302.

⁴ Pavlov, C. R., pp. 271–2.

⁵ Pavlov, C. R., p. 275.

tion to which we subject the conditioned stimuli. In drowsiness these inhibited agents recover, as we are inclined to think, temporarily, their original activity.¹

In the following passage, Pavlov quotes similar events, but described in greater detail.

One of my collaborators [he writes] brought to my notice a simple case of war psycho-neuroses. An ex-officer used to relive battle scenes whenever he fell asleep, shouting, running, giving orders, etc. We succeeded in reproducing a similar condition in a dog, in whom Dr. Konradi established several conditioned reflexes in response to the various notes of an instrument, each reflex being maintained by a different absolute reflex. The first note was associated with the oral exhibition of acid, the second with the offer of food, and the third with a strong electric shock in one paw. The current was so strong that it aroused a violent defence-reaction. This violence was further demonstrated by the fact that the two other reflexes were also complicated by a defence-reaction. Later the reflexes attached to the oral exhibition of acid and the electric shock were discarded, and only the alimentary reflex used. After some time, the defence-reaction became grafted onto the latter, which grew weaker and wholly disappeared after two months. A little later still, we were struck by the following strange event: whenever the dog fell into a hypnotic condition (the sure indication of which was the appearance of the paradoxical phase), the defence-reaction was aroused. When the condition passed off, the reaction disappeared. The analogy with the aforementioned clinical case is complete. It is a further confirmation of the usual explanation of such events: the traces of very strong stimuli persist in the sub-cortical centres, and emerge when the inhibitory influence of the surface is weakened.²

II. *A Comparison of Pavlov's and Freud's Results*

In our view, Pavlov's work, which we have just summarized, constitutes a true demonstrative proof of dynamism. It seems in fact quite impossible to interpret his results from a purely static standpoint. Let the reader recall our remarks on the subject of silent extinction. Absence of salivation is reached, no movement is discernible, nothing appears to be happening, and yet if the stimuli are continued by means of the conditioned excitant not reinforced by the addition of the absolute excitant, it is found that the period necessary for the spontaneous re-establishment of the reflex is longer than would have been necessary if the experiment had been con-

¹ Pavlov, L. C. R., p. 345.

² Pavlov, "La physiologie et la pathologie de l'activité nerveuse supérieure in *L'Encéphale*, November 1931, pp. 686-7.

cluded as soon as salivation ceased. How can we account for this silent extinction without invoking a dynamic concept? Whether we use the term "potency," "force," "energy" or "state of latency" matters little once we have recognized that the phenomena can only be explained by postulating a reality which is not itself a phenomenon. Conditioned inhibition, retardation, inhibition by differentiation, sleep—in short, every variety of internal inhibition might be quoted as evidence of the inability of static phenomenism to explain the activity of the cerebral cortex. The whole of Pavlov's work is simply a demonstration of dynamism.

But may not this dynamism be purely neurological? Has not Pavlov himself repeatedly asserted that he intended to keep within the bounds of physiology, and not tangle with psychology?¹ We do not for a moment dream of denying that Pavlov repeatedly manifests the most stubborn opposition to psychology. But as we see it, Pavlov's bias is much more methodological than dogmatic. He prefers the purely objective notation because it cuts short ambiguity and obviates fruitless controversy.² These advantages of the physiological method are undeniable, but once that is admitted, the philosophical problem remains untouched: Are the phenomena which Pavlov has investigated essentially of a psychic order?

We think that this question can only be answered in the affirmative, and ultimately this fact is universally recognized. Even the most radical mechanists have abandoned the theory of animal-machines, in the style of Descartes and Malebranche. The arguments in favour of the psychic quality of conditioned reflexes may be summarized as follows. Firstly, conditioned reflexes only exist in creatures with sense-organs; they presuppose visual, auditory, tactile and other such powers of reception. Now our internal experience tells us that in man sensory receptions are psychological phenomena. We could not deny them the same quality in animals without forgetting that man is himself an animal. We could not reduce the conditioned reflex simply to a hypo-psychological status except by identifying it with acquired vital rhythms in plants. In Volume I we quoted examples of these "habits" in vegetables, e.g. the persistence of the tide-rhythm under aquarium conditions among certain algæ, or of defoliation after transplantation to a tropical climate among certain trees. Since these acquired rhythms do not depend upon visual, auditory, or any other form of reception, they must be clearly distinguished from conditioned reflexes.

Careful comparison of the conditioned reflex with the vital

¹ Pavlov, C. R., pp. 1-7; Pavlov, L. C. R., pp. 37-41, 261-74.

² Pavlov, L. C. R., pp. 47-60.

rhythm will soon show us that these exhibit another fundamental difference. In the conditioned reflex, *reflexogenous power is acquired* by a hitherto ineffective agent.¹ The sound of the whistle accompanying the offer of food acquires the power of making the dog salivate. In the vital rhythm of the plant, on the contrary, no agent acquires any new power. We observe that conditioned reflexes and habits must not be purely and simply equated, as Pavlov sometimes appears to equate them.² Every conditioned reflex is a habit, but every habit is not a conditioned reflex. The acquired vital rhythm of the alga is a habit; it is not a conditioned reflex.

An objection arises against this view-point. We have seen that conditioned reflexes of time exist. The dog to whom food is offered every half-hour ends by salivating spontaneously after thirty minutes. Is not this a genuine conditioned reflex? And is it not also exactly comparable to vital rhythms? Must we not therefore conclude that vital rhythms are conditioned reflexes in which time acquires reflexogenous power? The difference between conditioned reflexes and vital rhythms disappears. The conditioned reflex is reducible to hypo-psychological, purely vital habit.

This objection needs careful examination. However realist we may be, we must recognize that time is not a positive cause, and that it is consequently absurd to maintain that it can produce a concrete effect. When we say that time acquires reflexogenous power, our phraseology needs interpretation. Pavlov was well aware of this. Moreover he has given time-reflexes an explanation which reduces them simply to delayed trace-reflexes. We know that the cessation of a phenomenon may become a conditioned stimulus. But after the phenomenon has ceased, its physical trace persists for a certain time in the sense-organs, as is proved by "consecutive images." The endo-organic stimulus, or trace, is an indisputable physical reality which we must be careful not to confuse with the memory or image of the phenomenon. We now see how the conditioned reflex may occur a certain time after the external stimulation has ceased. In these cases, the conditioned stimulus is not the passage of time, but what remains of the physical effect of the stimulus after a certain time has passed. Time-reflexes are therefore simply long-delayed trace-reflexes.³

This explanation saves us from the inadmissible paradox of attributing positive efficient causality to time. But we must inquire whether it is compatible with the identification of the conditioned reflex with the vital rhythm.

¹ Pavlov, L. C. R., pp. 51-2.

³ Cf. Pavlov, C. R., p. 43.

² Pavlov, C. R., p. 26.

If the time-reflex is merely a *delayed trace-reflex*, it is clear that it implies a sensory reception in the strict sense. Whether the latter is extraceptive or proprioceptive is immaterial; the existence of a sensory reception, of whatever type, is enough to distinguish the time-reflex or delayed trace-reflex from the simple acquired vital rhythm.

We must go further. The explanation of the time-reflex by the physical action of the trace is only intelligible for the first interval. Let us take the case of a dog which is fed every half-hour. At the thirtieth minute after its last meal, the persistent physical trace will provoke salivation. If the dog is not fed again, what explanation have we of the fact that the trace can again cause salivation at the sixtieth minute? The trace after sixty minutes is clearly different from the trace after thirty minutes.

Pavlov's published work only mentions results obtained after the first interval,¹ so that we do not know whether the time-reflex occurs again after the second and third intervals. We must therefore examine both hypotheses.

If the time-reflex occurs only after the first interval, it appears that Pavlov is quite right in regarding it simply as a delayed trace-reflex. *But then, since the trace-reflex implies a sensory reception and the acquisition of reflexogenous power by a previously ineffectual stimulus, we must recognize that the time-reflex is not reducible to an acquired vital rhythm.*

If the time-reflex occurs after a number of intervals in succession, without reactivation by the absolute stimulus, it seems impossible to identify it with the trace-reflex. How is it therefore to be explained? We have the choice of two interpretations. The first consists in saying that the time-reflex is a pure acquired vital rhythm, but as the latter does not exhibit the characteristic of conditioned reflexes, i.e. the acquisition of reflexogenous power by a real stimulus influencing a sense-organ, we must recognize that the expression "time-reflex" is incorrect, and that Pavlov was wrong to classify this particular phenomenon among the conditioned reflexes. The second interpretation consists in admitting that the phenomenon known as "time-reflex" involves two elements: (i) the formation of a purely biological vital rhythm, and (ii) the acquisition of reflexogenous power by this rhythm in its capacity as a stimulus of proprioceptive sensations. Whichever interpretation we adopt, the distinction between the vital rhythm and the conditioned reflex is maintained.

Our discussion of the time-reflex may give the impression of a somewhat excessive subtlety. To any who may remain unconvinced

¹ Pavlov, C. R., pp. 41-3.

of the necessity for a rigorous distinction between the acquired vital rhythm and the conditioned reflex, we shall put forward a simpler argument. If the acquired vital rhythms of plants were true conditioned reflexes, how is it that all other conditioned reflexes would be defective by comparison? We should have to admit that in the case of plants time is capable of acquiring a reflexogenous power which no other physical or chemical stimulus of any kind can acquire. We must obviously reject an interpretation with such a paradoxical conclusion.

We believe therefore that we have the right to conclude that the conditioned reflex is irreducible to the endo-psychic phenomenon of vital rhythm. The conditioned reflex is genuinely psychological.

The fundamental characteristic of Pavlov's method seems to us to be the investigation, by purely objective means, of a dynamism basically implying essentially psychological events. The procedure has its advantages which we have not sought to minimize, but it has also its disadvantages, or (perhaps preferably) its limits. It enables one to investigate psychic phenomena only in so far as they govern a secretory reaction. That is to say that it will be principally appropriate to research bearing on sensations, but that imagery will fall largely outside its range. As far as memory is concerned, the objective method has no means of discerning whether recognition takes place or not. As for the superior functions, reason and will, it is clearly impossible to investigate them by purely physiological means.

In spite of these deficiencies, Pavlov's work none the less gives Freud's claims a confirmation which, in several important points, amounts to a final demonstrative proof. The Russian physiologist's experimental neuroses are the reconstruction, by synthetic means, of the results which the Austrian psychiatrist obtained by analytical means. Freud had asserted that the psycho-neuroses were due to an interior conflict. An instinctive urge was thrust back into the unconscious, and successfully repressed for a longer or shorter period; then the balance was broken, the repression was held in check and the repressed returned in the form of neurotic symptoms. The accuracy of this schema is henceforth beyond all doubt, thanks to the principal experiment, which we have described more than once, whereby Pavlov produces a neurosis in the dog by inhibiting the defence-instinct by means of a conditioned reflex grafted onto the nutritional instinct. The generality of this process in the ætiology of the neuroses is still open to discussion, but its existence can no longer be challenged.

In Volume I we emphasized at some length the distinctions between Freud's and Janet's dynamism. It would, indeed, be unjust

to identify Janet's doctrine with pure staticism. But whereas he has skilfully analysed psychological tension, he has always refused to accept Freud's views on the importance of endo-psychic conflict and repression. He has attempted—most ingeniously—to fit his opponent's theories into the framework of his own system. It will be remembered that we qualified the types of neurotic ætiology accepted by each rival respectively as "deficit resulting from conflict" (Freud), and "conflict resulting from deficit" (Janet). In his long critique of psycho-analysis contained in Volume I of his *Psychological Healing*, Janet expresses his views on this subject in very exact terms: "The exaggerated repression characteristic of these patients," he writes, "is, then, to be regarded as a consequence of the depression."¹ And on the same page he asserts that repression is "no more than one of the symptoms of a particular form of psychasthenic depression."²

There is no ambiguity whatever about these statements, which are directly opposed to those of Freud. How does Janet justify them? He takes the case-histories of several of his patients, and shows that in these instances the weakening was primary.³ There are several points to note about this procedure. Firstly, Janet's logical process has very little intrinsic value. To prove that there are cases in which the ætiological role is not played by repression does not amount to proving that there are no cases in which the ætiological role is played by repression. But it is the latter proposition, not the former, that is in dispute. Secondly, a careful reading of Janet shows that he has given a very inaccurate version of his opponent's views. He always uses language which seems to imply that repression, in Freud's view, is a morbid phenomenon. This is a cardinal error. It is not repression that Freud regards as morbid, but on the contrary the failure of the repression which entails as a consequence the return of the repressed in the form of neurotic symptoms. This serious inaccuracy in Janet's interpretation of Freud is apparently due to the fact that the French psychologist is so preoccupied with criticizing his opponent that he does not contrive to understand his views. This leads us to a third observation. Freud's point of view is pluralist, whereas Janet's is unitary. This needs explanation. In Freud's view, the most normal human nature involves a plurality of forces more or less opposed to one another; this plurality is in the very nature of man. It follows that if a force, repressed until a given moment, contrives to free itself from repression (either through an increase in its own power, or through a decrease in that of the

¹ Janet, P. H., vol. i, p. 649.

² Janet, P. H., vol. i, p. 649.

³ Janet, P. H., vol. i, pp. 640–50.

process of repression), and if as a consequence of this failure of repression, neurotic symptoms make their way into the field of consciousness, there are no grounds for postulating that the conditions governing the failure of repression are intrinsically pathological. In Janet's view, the situation is quite different. He considers that the human being should normally be endowed with an almost perfect unity. He has all the difficulty in the world in conceiving that there can exist in our psychism forces really distinct to the point of being normally, or quasi-normally, antagonistic. In his view, the repressing force must always be capable of prevailing over the repressed impulses; the conditions governing the failure of repression are pathological by definition.

These considerations show that the dispute between Freud and Janet reaches the proportions of a conflict between two philosophies of the structure of man. Pavlov's method will do us the service of bringing the problem of the ætiology of the neuroses down onto the *terra firma* of experiment. It affords irrefutable proof of the existence of neurotic disorders due to a clash of opposed forces.

Under certain conditions [writes Pavlov] the clashing of excitation with inhibition led to a profound disturbance of the usual balance between these processes, and led in a greater or less degree and for a longer or shorter time to pathological disturbances of the nervous system.¹

A careful examination of the schemata of the experimental neuroses suffices to show that the disturbance of the balance between excitation and inhibition—the failure of repression, Freud would say—is the first pathological manifestation, and that it is preceded by no morbid phenomenon proper. The defence-instinct which impels the dog to escape the electric shock cannot of course be regarded as pathological. The same is true of the nutritional conditioned reflex and of its antagonism to the defence-instinct. The conclusion is perhaps even more evident if we consider the experiment in which the dog is made ill through failing to distinguish the circle from the ellipse. We must necessarily conclude, therefore, that Janet's claim to make a morbid symptom of repression is untenable.

But although the extremist formulæ which Janet uses in his opposition to Freud must be abandoned, it is none the less true that the problem of the causes for the failure of repression is still unsolved. Pavlov observed that the dogs' reaction to the clash of excitation with inhibition was very different.

One and the same injurious influence [he writes] causes severe

¹ Pavlov, C. R., pp. 292-3.

and prolonged disorders in some dogs; in others the disorders are only slight and fleeting; while yet other dogs remain practically unaffected.¹

In an article which has been translated into French after the publication of his great work, Pavlov gives further details.

We have never succeeded [he writes] in producing a nervous disorder in a dog of the compensated type; even the clash of the two contrary nervous processes of excitation and inhibition, for example, is ineffective in these cases. Yet this is our best means of producing pathological states.²

This statement is extremely important. It raises the question of the role of a constitutional factor in the ætiology of the psychoneuroses. Freud does not deny the influence of heredity, as we have already had occasion to point out in Volume I; he regards a purely psychogenic neurosis as nothing but an abstract idea.

It may be assumed [he writes] that neurosis hardly ever develops unless there are constitutional or congenital factors increasing the possibility for such a condition.³

A supporter of Janet's views might legitimately rely on Pavlov's observation to conclude that, without a certain constitutional weakness of psychological tension, the outbreak of a neurosis is impossible. We may suppose that, except in their terminology, Freud's and Janet's followers are not far from agreement—always provided that the actual causality of repression is admitted without dispute.

There nevertheless remains one obscure point in Pavlov's results. He seems only to have used full-grown animals for his investigations. How are we to distinguish what is innate from what is acquired? Even supposing that in animals this distinction is negligible; that does not hold good of the human species. Psycho-analysts will accept without difficulty the fact that certain adults are impervious to neurosis, even after repeated clashes of excitation with inhibition, but they will point out that Freud has always laid the emphasis on the conflicts of early childhood. Even after Pavlov's latest results, it is still possible to maintain that the clash of excitation with inhibition, as long as it is violent, repeated, and above all experienced early in life, must lead to neurosis in the most strongly resistant temperament. Let us not forget that, as Dupré says, the emotional

¹ Pavlov, C. R., p. 284.

² Pavlov, "Physiologie de l'activité nerveuse supérieure," in *Le Siècle Médical*, February 15, 1933, p. 10.

³ P. L. A., p. 169.

constitution "exists at the physiological level in the child. The suckling and the human infant are, in the normal state, constitutionally emotional."¹ We are therefore at liberty to agree with Freud in saying that a congenital predisposition is probably necessary for the outbreak of a psycho-neurosis, but that necessity has not been proved certain.

There are cases [writes Freud] in which the whole accent of causation falls on the sexual experiences in childhood; cases in which these impressions undoubtedly had a traumatic effect, nothing more than the average sexual constitution and its immaturity being required to supplement them.²

This assertion has not been refuted by Pavlov's experiments.

We have still to examine a final objection which could be urged against the reflexological corroboration of the Freudian schema of the return of the repressed. In order to avoid the vitally important concept of antagonism, of the clash of endo-psychic forces, a supporter of Janet might recast his earlier explanation of the contraction of the field of consciousness: instead of regarding that contraction as a weakness pure and simple, a negative phenomenon, he would look upon it as an anticipatory defence-reaction, a positive phenomenon. In Pavlov's language, he would say that repression is an induced internal inhibition. Furthermore, we could easily quote passages from Janet in which ideas of this kind are developed. Here is a particularly characteristic example:

A great contribution to the neglect of rest in fatigue has been made by an ill-defined idea that rest is a negative phenomenon, consisting simply in the disappearance of excessive action, and that this disappearance comes about through exhaustion of the primary action, without any other specific action. I have already had more than one occasion to discuss this conception when dealing with sleep, which is a form of rest, and to show that sleep is a true action, quite difficult and costing effort, which disappears in individuals who are really exhausted, and needs reorganization as much as walking or speech. Rest is not a paralytic state passively determined; it is an action, a characteristic form of behaviour.³

We observe that Janet's views on sleep are in full agreement with those of Pavlov. Might we not, in these circumstances, say that repression is an *active* contraction of the field of consciousness?

To regard repression as an active contraction of the field of consciousness does not enable us to identify Freud's and Janet's

¹ Dupré, *Pathologie de l'imagination et de l'émotivité*, p. 249.

² I. L., p. 305.

³ Janet, A. E., vol. ii, p. 258.

views. The originality of the former's standpoint remains unaffected. We must be convinced of this when we remember that the neurotic symptom is not constituted by repression (however it be interpreted), but by the return of the repressed. The active contraction of the field of consciousness is only pathological in so far as it permits of the invasion of the psychism by forces hitherto held in check. The Freudian pluralism, therefore, still remains necessary. But this is not all. An active contraction does not suffice to account for Pavlov's experimental neuroses; the contraction must be *induced*. Let us recall that negative induction is the release of an internal inhibition by an excitation. We say "excitation," and not "stimulus." The necessary condition enabling us to speak of negative induction is the occurrence in the animal of two distinct reactions: (i) a primary excitation, and (ii) a secondary internal inhibition. Our outlook is still pluralistic. Note in passing that the foregoing argument is applicable even in the case of a negative symptom, e.g. psychosexual impotence, a disorder resulting from the generalization of an external inhibition, and belonging therefore to a pluralist schema although not an instance of return of the repressed. Note, lastly, that it is highly questionable to identify the clash between excitation and inhibition with external inhibition, and then to reduce external inhibition itself to an induced internal inhibition. We shall have occasion to revert to these questions a little further on; for the moment, let us simply say that in his great work Pavlov has never explicitly identified the clash between excitation and inhibition with external inhibition, and that as far as the reduction of external inhibition to negative induction is concerned, he considers it too early to raise the question.¹ We are therefore at liberty to conclude that reflexology provides an objective demonstration of the Freudian schema of the neuroses.² There do exist psycho-neurotic disorders resulting from the clash of excitation with inhibition. The disturbance of balance arising from this clash constitutes the first pathological manifestation. It is effected with greater or less ease according to the constitutional resistance of the individual. Those of the compensated type are completely impervious to neurosis. We have no right to deduce from such cases of immunity at the adult stage that a similar immunity exists in childhood.

If the animal neuroses resulting from conflict between the defensive and nutritional instincts are of vital importance in the

¹ Pavlov, C. R., pp. 391-4.

² Although Pavlov nowhere establishes—at least in such of his works as have been translated into French—a comparison between his results and Freud's, yet he explicitly asserts that conflict-neuroses in men and in animals are fundamentally identical. Pavlov, C. R., pp. 400-1; Pavlov, L. C. R., p. 334.

corroboration of the Freudian schema of the return of the repressed, those brought about by the failure to differentiate between the circle and the ellipse are of no less interest. There is, indeed, reason to suppose that they enable us to understand the mechanism of disorders arising from the Œdipus complex. The fundamental difficulty of the Œdipus situation consists in this, that a certain complex stimulus (the mother) ought not to arouse the genital reaction, whereas another complex stimulus closely resembling the former (another woman) ought to arouse it. Thus formulated, the difficulty of the Œdipus situation is merely a sexual instance of the clash between excitation and inhibition by differentiation. At the most one might object that the stimulus which should be inhibited is absolute and not conditioned, as is also the stimulus which should remain active, whereas the circle and the ellipse are both conditioned stimuli. But the fact that the stimuli to be differentiated are both absolute in one case and both conditioned in the other does not in any way affect the difficulty in differentiation which constitutes the problem which the nervous system has to solve. It is therefore legitimate to admit that Pavlov's experiment throws important light upon Freud's assertion. We may for the moment set aside the problem of knowing whether *before puberty* the attraction for the mother was sexual or not; we shall revert to this later on. The neurosis breaks out because the genital reflex mechanism fails to differentiate between two similar stimuli. We had already elaborated this comparison between the difficulty of the Œdipus situation and animal neuroses resulting from a failure in differentiation, when we found in the works of a psycho-analyst, Dr. Allendy, an interpretation of the Œdipus complex exactly similar to the above, except that this writer makes no comparison between Pavlov's results and Freud's.

The Œdipus complex [writes Dr. Allendy] the enunciation of which raised such a storm, consists simply in this: while still at the breast, the little boy becomes wholly and exclusively emotionally fixated upon his mother, who becomes the sole object of all his desires. From weaning to the dawning of erotism, he must progressively modify this exclusiveness, apportion his transports, retain only a filial tenderness for his mother, and direct his nascent sexual curiosities and desires upon other people. Now it is extremely difficult to achieve this separation perfectly, and at the least hesitation, the boy finds himself faced with the alternative of experiencing incestuous desire or of crushing his partially developed erotism. This ends either in repression and impotence, or in compensatory perversion and homosexuality, or in some form of neurotic displacement, always charged with anxiety.¹

¹ Allendy, P., p. 126.

Œdipus disorders, as Allendy describes them, are clearly nothing but failures in differentiation.

The return of the repressed is achieved in dreams as well as in neuroses. The reflexological method hardly leads itself to the study of dreams. As we have already had occasion to point out, the image in itself eludes its scope. Pavlov's processes only enable us to grasp the two ends of the chain—the sensory stimulus and the secretory reaction. But if reflexology cannot attain dream-imagery, it can, on the contrary, reveal affective processes, in so far as they are linked to the secretory reaction. We are even justified in adding, from a strictly philosophical point of view, that since an affective state completely divorced from any cognitive state is an illusion, reflexology enables us to assert the existence in animals' dreams of an imagery related to the secretory (and more generally, the motor) reactions which they can exhibit during sleep. We have mentioned above the apparently spontaneous phenomena of salivation occurring in dogs during sleep. Pavlov explains these by saying that the traces of very strong excitations emerge when the inhibitory influence of the cortex is weakened. Although couched in different language, this amounts to Freud's theory of the return of the repressed during dreams. It must, however, be noted that in Pavlov's view the inhibited tendency which reappears when the inhibitory influence of the cortex is weakened is of no particular variety. Freud originally maintained that the motive force of the dream was always a wish, a theory which he later modified. The dreams of patients suffering from traumatic neuroses and the reappearance of undisguisedly painful memories in the dreams of all types of neurotics led him to the theory of the primacy of automatic repetition over the pleasure-principle. This important corrective enables us to say that in the opinion of both Freud and Pavlov the dream is the liberation of inhibited tendencies whose exact nature cannot be specified.

Before leaving this question of the return of the repressed in dreams, we must make two observations. Firstly, the close relation between the structure of neuroses and dreams is particularly clearly illustrated in the paradoxical phase, which was first discovered in undisguisedly pathological cases. Pavlov later supposed that the pathological state was constituted merely by the fixation, for a long period, of the paradoxical phase, which would be passed through very rapidly in both normal somnolence and normal wakening. This hypothesis has been verified by experiment.¹ Secondly, great philosophical controversy is raised by the nature of the trace which reappears when the inhibitory influence of the cortex weakens.

*When we were studying time-reflexes, we invested the word "trace" with a very precise meaning. The trace is an indisputable physical reality. It is what remains in the interior of the organism of the physical effect of the external stimulus after the latter has been suppressed. The trace is therefore both cause and object of a sensation proper, and is not identical with the physiological component of the sensation, image or memory. This is easy to observe in the case of consecutive visual images, which are generally admitted to be sensations and not images. Thus defined, the trace can fully explain the time-reflex after the first interval. But we are here discussing something quite different. Careful examination of the question shows us that Pavlov is here using the word "trace" to denote the physiological component of the image or memory. The word "trace" has therefore two quite distinct meanings. In the case of the time-reflex, it denotes a material reality existing beside the object of sensation. In the case of salivation during sleep, it denotes the physiological component of the images freed from cortical inhibition. A physiologist may miss the importance of this distinction, and we can well understand how Pavlov came to neglect it, but a philosopher must be more exact. The suspension of higher psychic activity in human sleep indubitably liberates other forms of activity, but these forms are both psychic and physiological; we have no right to maintain that the psychic component is merely the epiphenomenon of the physiological component, which would be a relapse to Binz's theory of partial awakening. We know that this writer attributed the incoherence of dreams, to the bringing into play of isolated cellular groups.¹ This explanation is unacceptable for it claims to account for a psychological phenomenon *wholly* by physiological conditions. We must not therefore allow ourselves to be taken in by Pavlov's formula which explains salivation during sleep by the disinhibition of traces of strong excitations.² Once more we observe that whereas the physiological method enables us to investigate sensations exactly (though its scope does not extend to their essence), it is far less effective where images and memories are concerned. To take certain of Pavlov's assertions literally would be to risk becoming the dupe of a pseudo-precision. Psychology must use physiology, but must not become its slave.*

Having examined the return of the repressed in neurosis and in dreams, we must pass on to that of therapy from the reflexological

¹ I. D., pp. 87-8.

² In the previous chapter, we came to use the word "trace" to denote both the physiological and the psychological components of the unconscious memory simultaneously. (D.)

point of view. After all we have said, it must be clear that *psycho-analytical treatment is, in the psychic field, comparable to homœopathy in the organic field*. De-repression is to the mind what fixation abscess is to the body.¹ The existence of paradoxical states explains hypnotic as well as oneiric hypermnèsia. Now between the inhibition of hypnosis and that of the analytical situation, there is at first sight (we shall revert to this question in the next chapter) a difference of degree only and not of nature. Ischlonsky, whose works have been made known in France by Meignant, is very clearly aware of the reflexological foundation of hypnotic or psycho-analytical hypermnèsia. "Psycho-analysis," writes Meignant, "assumes as a principle that every sufferer from tics or a stammerer is able, during hypnotic sleep, to give a perfectly clear explanation of the genesis of his tic or of his stammer, which he would be quite incapable of doing in the waking state."² This is quite true, but Ischlonsky, and perhaps Meignant as well, seem to fall into the empiricist error which Freud committed when he based his conception of dreams upon Bernheim's experiments.³ Hypnosis can bring back into the field of consciousness *states* which have once been, and have since ceased to be conscious, but it cannot make conscious *relations* which have never been so. That is why, however important de-repression may be, it could never replace interpretation completely. The tic-sufferer may, during hypnosis, recapture the memory of the events which have given rise to his tic, but hypnotic de-repression will cause him to know the events in question simply as events, and not as causes of his tic, unless the causal relation has been conscious at the actual moment of the tic's formation.

The various types of return of the repressed in neurosis, in dreams and in therapy do not exhaust the Freudian schema; we know that Freud believes that the energy prevented from discharging itself upon a sexual object may obtain discharge in the form of an activity of cultural value, e.g. may assist in the production of a work of art. This is the return of the repressed in sublimation. The qualitative aspects of the problem naturally demand a discussion which we shall not fail to give them later, but for the moment we shall simply propose a formula generally acceptable to all metaphysicians. We shall speak of psychic energy in general, and not of sexual energy. It will be universally admitted that the various psychic functions are more or less equivalent, at least in the sense that the intense activity

¹ Cf. Allendy, "La Loi de similitude en psychiatrie," in *L'Évolution psychiatrique*, 1934, bound vol. i, pp. 5-13.

² Meignant, "Sommeil et reflectivité conditionnelle," in *L'Encéphale*, March, 1933, p. 227.

³ I. L., pp. 84-5.

of any one of them brings about, either permanently or temporarily, a weakening of the others.

It is clear [writes Ribot] that the quantity of nervous influx is not expended in the same manner in both the mathematician engaged in speculation and the man engaged in satisfying a physical passion, and also that one form of expenditure hinders the other, since the capital sum of energy available cannot be used for two aims at once.¹

This is a fact that both rationalist and empiricist must admit, unless either has a different metaphysical interpretation to suggest. We shall reduce the concept of sublimation to this incontrovertible minimum. But besides sublimation thus conceived as the drainage of psychic energy in the direction of cultural values at the expense of the instincts, there exists a phenomenon which is as it were its counterpart. Instead of assisting the development of the higher psychic functions, the inhibition of the instincts may affect those functions themselves. In considering Leonardo da Vinci, Freud wondered why in certain persons the repression of sexual curiosity entails a general inhibition of the intelligence, whereas in others it facilitates the development of the propensity to abstract investigation.² But he believes that when confronted with a problem of this kind, psycho-analysis must give way to other systems.³ Jones has attempted to give a more exact reply,⁴ which Baudouin has summarized in a clearer form:

Sublimation is best achieved when there exists the most favourable distance in the associations between the object of the sublimated tendency (intellectual interests) and the object of the forbidden primitive tendency. When the distance is too great, that is to say when the resemblance is excessively faint, the affective interest is slower in displaying itself; when the distance is too small, the repression of the primitive tendency is liable to influence the new tendency, and interest is inhibited thereby, producing an impression of intellectual incapacity.⁵

Reflexology appears to be able (apart from the concepts of value and quality) to formulate Jones's solution quantitatively. In fact, it meets a similar problem on its own ground. Internal inhibition may either be irradiated, or induce a positive excitation at another cortical area. There are, moreover, certain differences to notice between the events described by Pavlov and those studied by Freud. Pavlov's irradiated inhibition is an internal variety, whereas Freud's repression corresponds to external inhibition. Moreover, Pavlov's irradia-

¹ Ribot, *Les maladies de la volonté*, p. 18.

² L. V.

³ L. V.

⁴ Jones, P. P., p. 604.

⁵ Baudouin, M. C., p. 97.

tion and induction are temporary processes, whereas Freud's generalized repression or sublimation are permanent. Lastly, in Freud's instances the inhibition affects the reason itself, a faculty which animals do not possess. These differences might indeed be partially reduced, for on the one hand, the identity of external inhibition and negative induction remains in doubt, and on the other hand, reflexology is not unaware of the stable processes of generalization and differentiation. We shall carry this discussion no farther. Our aim was simply to show that Pavlov's researches enable us to attack the problem of the conditions of the return of the repressed in sublimation more exactly.

Having compared Pavlov's and Freud's schemata of the general dynamism of neurotic symptoms, dreams, therapeutic de-repression and sublimation, we must now inquire whether Pavlov's experiments likewise enable us to verify what are known as "the Freudian mechanisms," i.e. condensation, displacement, dramatization, symbolization, and secondary elaboration.¹ The choice of the term "Freudian mechanisms" is perhaps not altogether fortunate, for these "mechanisms" involve an indisputably dynamic aspect. We may however point out, on Freud's own admission, that condensation appears as independent of repression.

Although condensation renders the dream obscure [he writes] yet it does not give the impression of being an effect of dream-censorship. Rather we should be inclined to trace it to mechanical or economic factors; nevertheless the censorship's interests are served by it.²

Eclectic psycho-analysts like Baudouin point out that Freud's admissions on the subject of condensation should logically be extended to the other "mechanisms," and that the study of the "mechanisms" should be sharply distinguished from that of repression and the censor.³ Freud himself only regards the mechanism of displacement as *always* dependent upon the censor. And we must add that he means displacement in its strictest sense, that which involves the *complete* separation of the affect from the representation to which it would normally be linked. Our own personal view is that three questions should be distinguished: (i) that of the conflict of tendencies, of repression, of the failure of repression and of the return of the repressed. This we have just dealt with. (ii) That of the "mechanisms." This we are about to examine. (iii) That of the use of the "mechanisms" for the purposes of disguise in order to escape the censor. This will find a place later on.

¹ Cf. chap. ii of vol. . ² I. L., p. 145. ³ Baudouin, S. P., pp. 65-75.

The first of the Freudian "mechanisms" is condensation. It will be remembered that it consists in the fusion of cognitive contents. The objective method does not enable us to study it in full detail. The reason for this is not far to seek. Although condensation often involves an important affective aspect, it is primarily a process concerned with cognitive contents, images and sensations. Now the image, as such, falls outside the scope of the physiological method. The physiologist makes indirect contact with images in so far as the motor or secretory reactions are modified by ascertained antecedent excitations. Pavlov's method is therefore applicable only when one of the condensed elements is an actual sensory impression. It obviously cannot be used when all the condensed elements are images.

As Baudouin has very rightly observed, there is continuity between simple associative evocation and condensation proper.¹ This statement leads naturally to the assertion that condensation and the conditioned reflex are closely akin. The sensation A produced by the absolute stimulus is artificially associated a certain number of times with the sensation C produced by the conditioned stimulus. When a sensation of the type C subsequently provokes salivation, we cannot but admit that this is due to its having evoked by association an image *a* of the absolute stimulus in the dog's psychism. This conclusion is corroborated by the impermanence of the conditioned reflex, which disappears when the conditioned stimulus is used too often without being reinforced by the absolute stimulus. Pavlov's theory of the manner in which the conditioned reflex is formed itself confirms this interpretation.

The chief function [he writes]—the formation of temporary connections—is based on the ability of the process of excitation to *concentrate*. The mechanism of the elaboration of the conditioned reflexes, the mechanism of association, may be considered to proceed as follows. If a strong stimulation, for example, that proceeding from food, occurs, then all other stimuli falling simultaneously on other parts of the brain, are drawn to this point of intense excitation (food centre), i.e. they concentrate here.²

The conditioned reflex involves the evocation of an image *a* by a sensation C through the repeated coincidence of the sensations A and C. An association of this kind is of an inferior type, based on continuity. The types of condensation which form the objects of psycho-analytical investigation are associations by similarity involving superimposed images. Whatever Spencer may have said on the

¹ Baudouin, S. P., p. 55.

² Pavlov, L. C. R., p. 332.

subject, association by resemblance does not permit of reduction to association by contiguity. We must go further: association by contiguity cannot function without making use of resemblance. When, in the classical example of conditioned reflex, the sensation C evokes the image a , it is important not to lose sight of the fact that there is a numerical distinction between the sensation C_1 which has served to form the reflex and the sensation C_2 which makes use of it. Two excitations distinct in time may be perfectly similar, but they can never be wholly identical. The sensation C_2 which evokes the image a can only, therefore, do so through the image c_1 of the sensation C_1 . It is possible that only metaphysicians will find this demonstration convincing; we shall therefore restate it differently. We have explained above that conditioned stimuli tended to become generalized. If, for example, we establish a conditioned reflex with a note of 1,000 vibrations per second corresponding to a sensation C_1 , salivation will also be induced by a note of 950 vibrations per second, corresponding to a sensation C_2 . It must perforce be admitted that in this instance the sensation C_2 has evoked the image a through the intermediary of the image c_1 . Evocation has therefore taken place by resemblance between C_2 and c_1 .

We observe that the fundamental process of condensation can be roughly verified by the physiological method, although not in all its possible varieties. The same may be said of displacement. In the wide sense of the word, displacement occurs whenever the affective charge of a cognitive content is communicated to another content. This is Ribot's "affective transference." It is clear that the conditioned reflex is only its physiological aspect. But as we have already explained in Volume I, displacement in the strict sense implies that the affective charge is detached from the normal stimulus and passes to the stimulus which replaces it. Displacement, as Baudouin very correctly remarks, is

of the same nature as what Ribot terms transference, but more comprehensive. The displacement with which we are concerned is a displacement of the affect or affective stress, a displacement in virtue of which the feeling or emotion is more or less completely detached from its real object in order to become attached to another object. It might be spoken of as a transference attended by forgetfulness, complete or partial, of the point of departure.¹

It is clear that forgetfulness of the point of departure is not to be verified in the conditioned reflex. But using the word "displacement" in its wide sense, the whole of Pavlov's work may be regarded as a study of displacement.

¹ Baudouin, S. P., p. 50.

Displacement based upon contiguity is to be found in all conditioned reflexes. Displacements involving more than two terms have their physiological counterparts in secondary or tertiary conditioned reflexes. Displacements based upon similarity are corroborated by the generalization of conditioned reflexes. Further proof might be adduced from irradiation, which is a temporary generalization. Generalization, whether permanent or temporary, may affect excitation as well as inhibition. Pavlov has even ascertained that irradiation of the inhibition could be effected from one sensory analyser to another;¹ Freud, in turn, holds (as we saw above when dealing with sublimation) that repression of the sexual curiosity may, in certain cases, become generalized to include all forms of curiosity, so as actually to give the false impression of a true weakening of the intelligence.² In this connection we need only point out how Pavlov's results corroborate the concept of displacement in the wide sense.

Dramatization follows displacement. It will be remembered that this mechanism consists in the substitution of an imaginary, concrete representation for abstract ideas. Dramatization is not to be found in animals, but its presence could be discerned in man by a purely objective method in cases in which an abstract idea (that of betrayal, for example), realized in an actual situation, contrives to transmit its reflexogenous power to stimuli related either by similarity or contiguity to the traumatic event. On the subject of anxiety attacks, which they prefer to call attacks of *kakon*, von Monakow and Mourgue write:

As in *petit mal*, the patient is usually astonished at these attacks, which are often occasioned by unconscious memories or by symbols, in similar circumstances. A young man, let us say, meets his fiancée walking arm-in-arm with a friend. He goes home full of indignation and bitterness. Shortly afterwards he suffers a violent *attack of kakon*. Later these attacks come to be aroused by unconscious reminiscences of this event, and also by symbols. If, for example, he hears the name of the street in which the meeting took place, an attack may occur, though he does not know why. This is known as *the extension of the reflexogenous zone*.³

What von Monakow and Mourgue call extension of the reflexogenous zone could just as well be described as generalization of a reflex or of affective displacement. A specific stimulus, e.g. the name of a street, becomes capable of liberating the emotion aroused by the fiancée's betrayal. We observe that dramatization is merely a special instance of displacement.

¹ Pavlov, C. R., pp. 123 et seq.

² L. V.

³ von Monakow and Mourgue, I. B. N., pp. 269-70. *Italicized in the text.*

The same might be said of symbolization. In the meaning which Freud attaches to the word, symbolization is a substitution of image for image, a substitution not peculiar to any given individual but common to all men, or at least to all members of a certain racial or linguistic group. In short, symbolization is a collective displacement. We at once observe that the existence of this mechanism is corroborated simply by the fact that, within certain limits of resemblance, the generalization of a conditioned reflex is common to all the animals of a particular species.

There remains secondary elaboration. This mechanism cannot be investigated by the objective method. Moreover it is of very little (if, indeed, of any) interest from the psycho-analytical point of view.

This comparison of Pavlov's and Freud's results has shown us that the dynamic schema of the clash of psychic forces and the principal mechanisms described by Freud may be objectively corroborated by reflexology. We have still to examine the differences between their doctrines.

The first difference results directly from the fact that psychology cannot be reduced to physiology. Pavlov only studies movements, whereas Freud analyses cognitive or affective states and movements cognitively-affectively governed. We have already mentioned our view that the originality of Pavlov's method consists in the attainment, by a purely objective route, of a dynamism whose fundamental postulate is that of essentially psychological events. In other words, the movements which Pavlov has studied are cognitively-affectively governed. We hold that reflexology is an auxiliary method to psychology. We are well aware that certain thinkers have tried to regard it as a system of materialist metaphysics, a point of view which we utterly repudiate. We believe that Pavlov's hostility to psychology is methodological rather than dogmatic. He may even, possibly, have been mistaken on the bearing of his process: every discoverer, surely, tends to over-estimate the value of his discovery. There is no lack of arguments against a dogmatic-materialist interpretation of reflexology. A detailed evaluation of them would, however, be outside the scope of this work. Let us simply point out that silent extinction is incomprehensible physiologically, but ceases to be so when envisaged psychologically. We might here apply Leibniz's famous dictum, and say that reflexology is true in what it asserts, and false in what it denies.

The second difference between Pavlov and Freud is in a manner the inverse of the former: Pavlov is more of a finalist than Freud. For a complete understanding of the opposition between Pavlov

and Freud where finality is concerned, we shall recur to a comparison we have already used in Volume I. Disorders resulting from lesions may be likened to the breakage of one of the component parts of a locomotive, whereas exhaustion is represented by the lack of water or coal. The collision between two locomotives moving in contrary directions on the same track corresponds to repression or external inhibition. Internal inhibition is represented by the behaviour of the driver who notices, while the locomotive is in motion, that he is going to run out of water or coal, puts her into reverse and travels back to the station.

This comparison enables us to realize how far Pavlov's doctrine is steeped in finalism. The foregoing pages have shown us the vitally important role played in Pavlov's system by the concept of internal inhibition. Now he regards internal inhibition as "preventing any dangerous functional destruction" of the nerve-cell.¹ In his view, internal inhibition is a defence-reaction characterized (to apply Lhermitte's excellent phrase) by "the priority of an activity over the phenomenon which has to be avoided because it is more or less harmful."² This is the truest possible finalism.

In order to maintain that the psychologist Freud is as finalist as the physiologist Pavlov, we should have to discover in Freudian doctrine an *adequate* equivalent of internal inhibition. We doubt very much whether this is possible. At first sight, two of the concepts with which Freud is familiar seem able to bear comparison with internal inhibition: (i) regression, and (ii) the death-instinct. We shall examine these in turn.

It will be remembered that Freud admits three kinds of regression: (i) topical regression, when a psychic process, instead of going from perception to motility, takes the wrong path; (ii) temporal regression, consisting in the reversion to older psychic formations; and (iii) formal regression, when primitive modes of expression and representation replace modes which have become habitual in the adult.³ Freud admits that regression occurs when the libido fails to find satisfaction in the external world; it then becomes detached from objects, is introverted, and returns to the narcissistic fixations of early childhood.⁴ Is Freud's regression equivalent to Pavlov's internal inhibition? We regard it as doubtful. Without taking into account the obscure passages in which Freud seems to portray regression simply as a result of the failure experienced, its finalist quality is less marked than that of internal inhibition from the mere fact that it is compensatory and not preventive. Pavlov is a physiologist, engaged primarily

¹ Pavlov, C. R., p. 250.

³ I. D., p. 505.

² Lhermitte, S., p. 57.

⁴ I. L., pp. 285 et seq.

in investigating the normal condition of the various functions; he is naturally led to lay stress upon the anticipatory defence-reactions. Freud is a physician, engaged in treating nervous patients; it is not in the least surprising that he should stress the compensatory formations of already existing disorders. The absence in Freudism of an adequate equivalent of internal inhibition becomes really striking when we compare Pavlov's and Freud's theories of sleep. The explanation of sleep is one of Pavlov's most important results, and Lhermitte could express the view that his researches "have without doubt thrown a flood of light upon the once so obscure mechanism of physiological and of morbid sleep."¹ Freud's comparison between sleep and the intra-uterine existence certainly does not deserve the same praise.² Of the eclectic psycho-analysts, Baudouin has worked out a conception of the retreat-tendencies which comes very close to Pavlov's idea of internal inhibition, if it is not actually identical with it.³

We need not, for the moment, discuss the death-instinct in itself. It is enough to note that since it does not tend to the good of the individual or the species, but on the contrary to the extinction of life, it has no right to be regarded as an adequate equivalent of internal inhibition. This is so obvious that by no means all of Freud's supporters are content to follow him in his paradoxical assertion that life may tend to destroy itself. Thus for example Saussure, who is none the less a genuine Freudian, substitutes the instinct of inhibition for the death-instinct.⁴ In this he agrees with an eclectic like Baudouin.⁵ Their position on the psychological level agrees with Pavlov's on the physiological level.

Although on the question of finalism there seems to be a fairly serious discrepancy between Pavlov's and Freud's ideas, the last difference we must discuss appears, on the contrary, almost to be one of pure terminology. We refer to the comparison between the Freudian concept of repression on the one hand, and Pavlov's three concepts of conflict, external inhibition, and negative induction on the other. We have already had occasion to point out that Pavlov offers no complete theory of the relations between these three concepts. He seems never to have identified conflict with external inhibition, and he hesitates to identify the latter with negative induction. The solution of these questions is quite unimportant for our purposes. Whether, in the problems which it shares with psycho-

¹ Lhermitte, S., p. 76.

² I. L., pp. 71-2, 348.

³ Baudouin, M. E., pp. 200-1.

⁴ de Saussure, "Instinct d'inhibition," in *Revue de Psychanalyse*, vol. iii, No. 3, pp. 491-508.

⁵ Baudouin, M. E., p. 231 (note 2).

analysis, reflexology makes use of two or of three concepts, has no bearing whatever on the substantial agreement between Pavlov and Freud. Whatever terminology he may use, Pavlov is bound to invoke psychic forces which are not only distinct, but antagonistic, which is the very essence of the theory of repression. If we wished to carry the study of such problems as the conditions of sublimation further than psycho-analysis carries them, it might be interesting to know the exact relations between conflict, external inhibition and negative induction, but it is certainly not necessary simply to corroborate Freud's dynamic schema. It is thus that in the foregoing pages we have come to compare repression with one of Pavlov's three processes at random.

We hope that those who have followed this exposition of Pavlov's results and their comparison with those of Freud will spare us the classical objection of the hide-bound defenders of introspection, who claim that the objective method is merely a laborious and irksome process for the rediscovery of what the psychology of consciousness has known from time immemorial. That is only true of certain very simple facts, but in instances manifesting any difficulty, the results of the subjective method become inaccurate and often even disputable. On the purely psychological level, the controversy between Janet and Freud might be indefinitely prolonged. The application of the reflexological method shows, beyond any possibility of dispute, the ætiological role of the clash between excitation and inhibition. The language of the psychology of consciousness is unable to express the processes of irradiation and concentration, which the objective method discovers, with sufficient clarity. Given a dog in which a conditioned reflex has been established at three different places on his skin—the anterior point A, the posterior point P, and the middle point M. These points are equalized so that at each of them a stimulation of half a minute produces enough saliva to reach the thirtieth unit of the graduated test-tube. Then the point A is brought to extinction. If the point P is stimulated as soon as the extinction of A is achieved, it is found that P produces thirty units of saliva. In later experiments, it is found that for an interval of 15 seconds the point P produces 5 units, and that for an interval of 20 seconds, it is completely inhibited. This is clearly a case of progressive irradiation of the inhibition of extinction. After 30 seconds, the point P begins to be disinhibited. After 50 seconds, it produces 20 units of saliva. After 60 seconds, it is completely disinhibited. Here we have been able to follow the stages, first of the irradiation, then of the concentration of the inhibition. In objective language, these facts are expressed in exact quantities; in the terminology of the psycho-

logy of consciousness, we should have to be content to formulate them qualitatively. We should say, for example, that there occurred progressive generalization of the inhibition, followed by an equally progressive specialization. The physiological method enables us to go further, and to predict, in terms of time, how great the effect will be at each point between A and P. Let us consider the middle point M. Since it is situated half-way between A and P, it should be completely inhibited after an interval of time half as great as that necessary for the complete inhibition of the point P. Experiment confirms this. Stimulation of the point M immediately after that of the point A only produces 20 units of saliva, and the point M is completely inhibited after only 10 seconds. Remember that the point P is not completely inhibited until after 20 seconds. Reflexology therefore enables us to measure the speed of propagation of the irradiation (or the concentration) of inhibition by extinction.¹

We have given a detailed account of the above experiment simply in order to induce the reader to adopt the psycho-analytical viewpoint. We never regard the study of reflexology as other than a means. The important conclusion which arises from our study of irradiation and concentration is that the distribution of the reflexogenous power takes place according to purely objective laws. It would be absurd to claim that the strictly mathematical relation governing the reaction of point P or point M in terms of point A cannot exist in the animal unless it is known to him. Yet because we are dealing with sensory receptions, the phenomena must be genuinely psychological. The distribution of reflexogenous power is only the secretory translation of the distribution of affect. We are bound, therefore, to conclude that the laws governing the latter are independent of the subject's consciousness of them. But it follows that the criticisms directed against the unconscious character of the Freudian mechanisms (condensation, displacement, dramatization and symbolization) must be abandoned. Similar causes have similar effects upon the psychism without any need for that similarity to be known. The law of relational unconsciousness which we formulated in Volume I, relying on introspective psychology, is decisively confirmed by reflexology. We are now in a position to examine the validity of the methods whereby Freud proposes to study unconscious psychic relations.

¹ Pavlov, L. C. R., pp. 272-4.

CHAPTER III

THE METHODS OF EXPLORING THE UNCONSCIOUS

The two previous chapters have—or at least we hope they have—justified the concepts of “unconscious” and of psychic dynamism. But although the objective method enables us to study the modifications wrought by past experience upon reactions to sensory stimuli, it is of no further assistance to us. Its range does not cover the independent life of images; *a fortiori* the realm of the rational is closed to it. Investigation of the substructure of dreams, neuroses, and hallucinations would be impossible unless we could avail ourselves of the special processes of psycho-analysis. This chapter will be devoted to the discussion of the value of these technical methods, and to the statement of the conclusions to which that examination leads. It comprises three sections: (i) the associative method, (ii) the symbolical method, (iii) conclusions.

I. The Associative Method

The associative method aims at achieving two results—de-repression and interpretation. A comparison of the expositions of it given by various psycho-analysts shows that some lay the emphasis exclusively upon de-repression, others upon interpretation. Neither of these two aspects of the method should be neglected in favour of the other. Interpretation alone does not suffice. This becomes obvious when there is unconsciousness of causes. Given a symptom dependent upon a forgotten memory of childhood, it is clear that the reconstruction of the content of that memory by means of causal inference is a process quite different from the reintegration of the said memory in the field of consciousness. When the memory reappears, it brings with it something absolutely original. In the same way as sensation is characterized by intuitive reference to the actual existence of its object, so memory implies what one might call intuitive reference to the past existence of its object. It may seem paradoxical to speak of intuition of the past, but reflection on the problem of existential certainties, whether they involve the present or the past, will show us that they form a world apart. Present existences are ascertained, not demonstrated, or only demonstrated by a proposi-

tion relying upon an existential premise itself ascertained, not demonstrated. This quality of ascertainment of the present in the very fact of its existence is transmitted by sensation to memory. It follows that the remembered and the reconstructed are poles asunder. No parallel can be drawn between my memory of an eclipse which I have seen and my knowledge through astronomical calculation of an eclipse which took place two thousand years before I was born. It is astonishing that anything so evident should be misunderstood. No one would dispute it if it were not linked to the controversy between realism and idealism. The concept of time has always been a stumbling-block to the idealist systems. Let us draw particular attention to the fact that the admission of the irreducibility of memory leads to a realist conception of memory and the unconscious. This is the very realism for which certain philosophers blame psycho-analysis. We have defined our position on this question sufficiently clearly not to need to return to it. We wished simply to recall the philosophical foundation of Freud's repeated assertions concerning the insufficiency of interpretation and the necessity of de-repression.

Our knowledge of what is unconscious in him (the patient) [he writes] is not equivalent to his knowledge of it; when we tell him what we know he does not assimilate it *in place* of his own unconscious thoughts, but *alongside* of them, and very little has been changed.¹

If interpretation cannot replace de-repression, the converse is equally true: de-repression cannot take the place of interpretation. We pointed out in Volume I that although in certain instances there might only be unconsciousness of relations, every instance involving unconsciousness of causes must necessarily also involve unconsciousness of relations. The problem of interpretation, therefore, still arises. There are instances in which its solution is so clear that knowledge of the cause and of the effect seems to be identical with knowledge of the causal relation. This is an illusion. In Volume I we emphasized relational unconsciousness at some length. It is the philosophical foundation for the necessity of interpretation.

The first condition of the investigation of the unconscious is therefore the accomplishment of de-repression, or, if my readers prefer the term, of functional liberation. The higher psychic functions normally control the lower. This control must be momentarily interrupted in order to obtain the emergence of the lower psychism into the field of consciousness. Pavlov's terminology enables us to

¹ I. L., p. 364. *Italicized in the text.*

define this operation with perfect exactness. The artificial inducement of internal inhibition of the higher psychism necessarily entails external disinhibition of the lower psychism.

Three processes may be used in order to obtain internal inhibition of the higher psychism. The first involves the action of drugs, among which ether deserves special mention. It was used towards the middle of the nineteenth century by Morel, and has recently been restored to favour by Professor Claude. Etherization often enables complexes of indisputably traumatic action to be brought to light. Here is an example of this. A girl of fourteen, whose case had been diagnosed by several physicians as one of dementia præcox, was brought to consult Dr. Nathan. She had lost consciousness as a result of sun-stroke. When she came to herself, her disposition seemed completely altered. She was unstable, agitated, and clumsy in handling objects; she chattered senselessly, laughed and cried for no reason, and indulged in lavatory talk. The unusual mode of onset of the symptoms aroused Dr. Nathan's suspicions. He administered ether, and learnt that two years previously she had witnessed parental coitus. Although this scene had distressed her terribly, she had been resolute enough not to let anyone know of her painful experience. Dr. Nathan was able to reassure her, and three weeks after her entry into an asylum, the patient had once more become normal.¹ The detailed study of the methods of investigating the psychism by the action of drugs does not enter the scope of this work. We shall simply make two observations on this subject. Firstly, certain writers lay more stress upon the stimulation of the lower psychism than upon the inhibition of the higher. We may inquire whether this is not a rather too superficial manner of analysing events. Secondly, other writers of organicist tendencies believe they can use the toxic narcoses as an argument to make a breach in the psycho-dynamic conception which regards sleep as an anticipatory reaction of an organic defence-instinct. We might refute this objection by emphasizing the very real differences between the toxic narcoses and normal sleep, but this reply may seem evasive. It seems preferable to turn the argument round, and to regard the toxic narcoses themselves, at least so long as the intoxication is not considerable, as anticipatory defence-reactions. We in fact find, in the most normal sleep, a toxic substance which Piéron has called hypnotoxin present in the blood and in the cerebrospinal fluid. But Piéron does not conclude from this that sleep is an intoxication pure and simple. He admits that "hypnotoxin probably does not provoke sleep by direct intoxication of the cellular elements of the brain, but

¹ Nathan, *Troubles juvéniles de l'affectivité et du caractère*, pp. 73-7.

rather by arousing an inhibitory reflex.”¹ If we admit this mechanism for internal intoxication in normal sleep, we must logically extend it to external intoxications in the narcotics. We thus obtain a more coherent and satisfactory general view.

Hypnosis is the second process whereby internal inhibition of the higher psychic functions may be achieved. It is induced by the monotonous repetition of weak stimuli. Here again we find Pavlov’s doctrine a great help in explaining the facts. Whether internal inhibition is caused by a toxic agent or by the repetition of a visual, auditory or tactile stimulus, the phenomenon is fundamentally the same; only the external agent which arouses it varies. To Pierre Janet belongs the undying distinction of having been the first to make known to the scientific world the value of hypnosis for the investigation of the unconscious psychism. This part of the great French psychologist’s work seemed subsequently to have been discredited, following Babinski’s critique and Dupré’s downright denials. For some years hypnosis was regarded (at least in France) as spurious. We have shown above how Pavlov’s discoveries utterly wiped out this elegant scepticism. On the first page of the general work in which he summarized his views on hypnotism, a work prepared before the war but not published till after its close, Pierre Janet wrote:

Twenty years ago I exposed myself to contempt by saying that hypnotic suggestion was not everything; . . . to-day, I run the risk of making people laugh at me by saying that hypnotism counts for something after all. The contempt and the laughter leave my withers unwrung. Moderation is the best aid to the discovery of truth. If my book be ignored to-day, it will be read to-morrow, when there will have been a new turn of fortune’s wheel, bringing back treatment by hypnotic suggestion just as it will bring back our grandmothers’ hats.²

Janet’s prophecy is beginning to be realized. Psychiatrists such as d’Hollander in Belgium and Nathan in France admit recourse to hypnosis in certain cases.³ Here is an old case-history of Janet’s which well illustrates the possible role of hypnotism in the investigation of the unconscious. Among other hysterical symptoms, Marie exhibited complete and continuous blindness of the left eye. In the waking state, she maintained that she had been thus since birth. Janet hypnotized her, and learnt that at the age of six Marie had been forced, in spite of her cries and protests, to sleep with a child of her

¹ Lhermitte, S., p. 55.

² Janet, P. H., vol. i, p. 151.

³ Nathan, *Les psychoses inévitables*, p. 224; Nathan, *Manuel élémentaire de psychiatrie*, p. 294.

own age who had had bad excemations over the whole of the left side of her face.¹

The third process used to bring about internal inhibition of the higher psychism consists in voluntarily suspending self-criticism and self-guidance. It is characteristic of psycho-analysis. We at once see how Freud's technique differs from the techniques involving use of drugs and hypnosis, while being closely akin to them. Voluntarily *produced* inhibition of the higher psychism is generally weaker *than that which can be achieved by the other processes*. Certain writers state in consequence that psycho-analytical investigation takes place in the waking state. This statement is inaccurate. The mental state of the analysand varies from one session to another, and even during the course of the same session. It fluctuates between the level of logical thought and a level very close to that of hypnosis or dreams. Kretschmer has given an excellent description of the state of psychic inhibition produced by voluntary suspense of self-criticism and self-guidance.

The more completely we relax into passivity, the more nearly does free association approximate to the psychic mechanisms of dreams and hypnosis. Linkage by sentences begins to loosen, the verbal formulation of thoughts yields noticeably to concrete imagery, to the direct contemplation of living figures as scenes which rise into the mind's eye. The temporal framework also loosens *pari passu* with the consciousness of the complete passivity of our inner experience. Memories of the past and desires for the future are experienced with the vividness of actual current events. That is about the extreme limit of waking thought. With a further increase of psychic relaxation, consciousness becomes progressively more vague and nebulous. After the dissolution of the temporal framework, the spatial objectivity of things begins to weaken; exuberantly fantastic elements, i.e. asyntactical catathymic imaginal agglutinations, begin to insert themselves between the scenically arranged groups.²

I have purposely quoted this vivid description because many writers completely misunderstand the vitally important role of voluntary internal inhibition of the higher psychism in the course of analytical investigation. Von Monakow and Mourgue, for example, say that Freud relies "on conversations with a certain class of patients."³ A few pages later they repeat that the emotions released by symbols of painful past events may be brought to light, "as Freud has shown, in the course of conversation."⁴ The term

¹ Janet, A. P., pp. 439-40.

² Kretschmer, T. M. P., p. 112.

³ von Monakow and Mourgue, I. B. N., p. 249.

⁴ von Monakow and Mourgue, I. B. N., p. 257.

"conversation" to denote analytical investigation could not have been worse chosen; it is calculated utterly to mislead those who have not had personal experience of the obvious difference between waking thought and that which results from voluntary suspense of self-criticism and self-guidance. Our comparison between toxic, hypnotic, and psycho-analytical inhibition enables us to form an exact idea of the nature of the last mentioned.

The emergence of the unconscious psychism is also facilitated in *the course of analysis by the breaking down of resistances*. Although at first voluntary, the rejection-reactions to certain memories end by becoming automatic. The memories in question are then blocked by an external inhibition, which cannot be removed simply by the suspense of self-criticism and self-guidance. This can only be accomplished by interpretation, which brings the repressing force back into the field of consciousness, where it ceases to become automatic and is dissolved. Thus the liberation of the repressed becomes possible. We see that de-repression involves a dual external disinhibition, the first being an immediate consequence of the voluntary internal inhibition of the higher psychism, and the second being a result of the dissolution of the automatic repressions through their interpretation and penetration into the field of consciousness. Note that when the analysand understands an interpretation and when he launches on a train of associations, he is on different psychic levels. We become fully aware of this when we analyse our own dreams by ourselves; we often fail because we try to associate and interpret simultaneously. These two operations can only be successive.

Our remarks on the dissolution of resistances by interpretation show that de-repression and interpretation are reciprocally causal. A minimum of voluntarily produced de-repression gives us access to associative material in which interpretation will discover and resolve automatic resistances whose disappearance will allow of more complete de-repression. That is why we said at the beginning of this section that the two processes of de-repression and interpretation must not be separated.

In dealing with de-repression, we have already had to deal with interpretation. The time has now come to study it for its own sake. As we have already shown in Volume I, interpretation is based on the concept of *psychic expression*, a concept which we must now justify. To this end, we shall start from the idea of "sign." A sign is a reality, knowledge of which leads to another reality distinct from the former.¹ Take the example of a gamekeeper examining tracks in a wood. The reality manifested to his senses is a geometrical form

¹ Instead of "sign" one might say "index." (D.)

impressed upon the damp earth. Hence he deduces another reality—the recent passage of a ten-point stag. The imprint may therefore be regarded in two ways; it is an effect and a sign—an effect-sign, *let us say. As an effect, it is conditioned by the actual passage of the animal.* As a sign, on the contrary, knowledge of it conditions that of the stag's passage. A sign of this kind is a natural sign; here we have no need to study artificial or conventional signs. Among natural signs, a place must be found for cause-signs beside effect-signs. We say, for example, that a black cloud is a "sign" of rain. But in psycho-analysis we are, practically speaking, not concerned with cause-signs.

Effect-signs may be classified in many ways. For our purposes we need only take into account those which are used in human knowledge, which we shall divide into four groups. In the first, the sign and the signified are both organic. This includes most of the signs studied in medical semeiology, which are usually called objective symptoms. Babinski's sign, for example, is the symptom of a disorder of the pyramidal tract. In the second group, the sign is organic, but the signified is psychic. The expression of emotions is included in this group, e.g. grinding of the teeth is regarded as a sign of rage. In the third group, the sign is psychic and the signified organic. This includes the pains characteristic of certain lesions. A natural generalization of the concept of objective symptom leads us to call the signs of the third group subjective symptoms. In the fourth group, the sign and the signified are both psychic. Strange as it may seem, prior to Freud the signs of the fourth group were almost completely neglected or misconceived. In order to distinguish them clearly from all the others, we designate them by the term *psychic expression*.

The philosophical principle upon which the concept of psychic expression is based is that of the homogeneity of cause and effect. It may be formulated in various ways: "no effect can be superior to its cause," or "the whole perfection of the effect must pre-exist, at least virtually, in its cause." As ordinary common sense puts it, "none can give what he does not possess." All these formulæ are fundamentally equivalent, and express an absolute requirement of reason. The principle of the homogeneity of cause and effect constrains us to assert that it is impossible that a psychic reality should have a non-psychic reality as its *total* cause.

It will perhaps be objected that there are instances in which the psychic is the effect of the organic, and sensation, in which a material reality is both cause and object of sensory knowledge, may be quoted as an example. It would indeed be impossible to dispute the condi-

tioning of sensation by a material reality, but it is a far cry to conclude from this that the material reality in question is its *total* cause. A question of this kind clearly cannot be resolved by experience alone. *The rational demand for homogeneity therefore remains intact, and leads us to regard sensation as the effect of a dual causality—that of the object, and that of the subject.* Sensation owes its content to the object, its psychic character to the subject. We may regard a painful sensation, for instance, as a sign of the third group, i.e. as the subjective symptom of an organic lesion. But since the lesion is not the *total* cause of the sensation, the latter requires a psychic cause. We are therefore also at liberty to regard the painful sensation as a sign of the fourth group. This point of view is scientifically fruitless, for it leads us to regard sensation as the psychic effect-sign of a sensory “faculty.” A concept of this kind is purely philosophical, and of no interest to the scientist. If, instead of a sensation, we consider a cœnesthetic dream, we shall reach a rather different result. As a sign of the third group this dream is a psychic symptom of an organic state. As a sign of the fourth group, this dream is the psychic expression, no longer of a faculty, but of an antecedent state. This time we are no longer on metaphysical ground, but on scientific. Here is an example which well illustrates the bearing of this distinction. One of Minkowski’s patients dreamt that “someone, who seemed to her to be her brother, gave her an injection in the gum. The next day, or the day after, she developed a dental abscess.”¹ The dental abscess fully explains the appearance in the dream of the image of an injection, but it affords no explanation as to why that injection was attributed to the brother. Minkowski tells us that “the conflict with her brother lay like a red streak across the whole life”² of his patient. It would therefore be quite insufficient only to envisage this dream as a sign of the third group. When we come to examine it as a sign of the fourth group, we find that it reveals an important complex. Reflection will show us that the same must be true of all cœnesthetic dreams. Whenever these cannot be reduced to pure sensations, their imaginative content cannot have as its cause the state of the organism; it must therefore be the effect of antecedent psychic factors. Havelock Ellis has seen this very clearly. He distinguishes *presentative* from *representative* dreams, meaning “by representative, ‘connected through the fact of association with the waking life of the past,’ and by presentative, ‘connected through

Minkowski, “De la rêverie morbide au délire d’influence,” in *L’Évolution psychiatrique*, old series, vol. ii, p. 135.

² Minkowski, op. cit., p. 153.

sense excitation with the immediate present.'"¹ Having laid down these definitions, he formulates his conclusion:

A truly presentative dream is impossible. If our senses receive an impression, external or internal, and we recognize and accept that impression for what we should recognize and accept it when awake, then we cannot be said to be dreaming.²

The foregoing considerations seem to us wholly to justify the concept of psychic expression. Setting aside sensation, which (considered as psychic expression) is only of interest to metaphysicians, all the psychic states are, at least partially, effects of antecedent psychic states to which they lead back by way of causal inference, which is the very definition of the sign. All psychic states are therefore signs of the fourth group, and can be studied under this aspect.

We are therefore led to inquire why the concept of psychic expression has been so much neglected until Freud's day. Examinations and tests are the only uses to which it had previously been put. Both these types of trial inevitably involve a material expression in word or in writing. But it is of no interest to us here, and we may overlook it. This material expression bears witness to the existence of a certain psychic content, and it is with this psychic content that we have to deal. In the instance of the examination, taking the word in its narrow meaning, the psychic content inferred from the spoken or written words is regarded as a specimen, a sample of the candidate's entire stock of knowledge. We may call it the sign of it. The particular instances of knowledge which the candidate manifests during the examination are the psychic expression of his intellectual capital. Whereas the examination, in the strict sense, aims at discovering what knowledge the candidate has acquired, the aim of the test is to determine his qualifications. We may say, indeed, that every problem is a test. The subject's reply to the problem which he is set is the psychic expression of his mental capacities. Examinations and tests enable us to investigate cognitive acquisitions and qualifications. Other tests also exist, designed to allow the emotivity to be gauged. It cannot be disputed that examinations and tests are based upon psychic expression, but the use which they make of it is limited. Examinations only reveal cognitive acquisitions, just as tests only disclose general capacities, whether cognitive or affective. Neither of these two types of trial enables us to study the evolution of an individual psychism. Prior to Freud, hardly any interest seems to have been taken in determining the methods whereby

¹ Havelock Ellis, *The World of Dreams*, p. 17.

² Havelock Ellis, *op. cit.*, p. 18.

it is possible to relate a psychic state to antecedent psychic states which are its causes. To what is this omission due?

As far as logical thought is concerned, its aspect of psychic expression is almost wholly masked by its aspect of truth, of conformity to the real. In normal psychology, it is quite natural that the study of the cognitive should eclipse that of the expressive function. Unless, indeed, the role of each is laid down with the most rigorous philosophical precision, there is a great risk, in considering for example a discovery as the effect-sign of the subject's antecedent preoccupations, of misconceiving its most important aspect, i.e. that of novel truth. The logical approach is indispensable in normal psychology; if we attempted to dispense with it, we should at once fall into absurdity. At first sight it is rather difficult to reconcile conditioning by the object (the aspect of truth) with conditioning by the subject (the aspect of psychic expressionism). In asserting the latter, we seem to be denying the former. How is it possible that, although the content of true knowledge is *totally* determined by the object, yet true knowledge may still be regarded as psychic expression? It is only possible through the introduction of some subtle metaphysical distinction, e.g. that the "specification" of true knowledge is conditioned by the object, and its "exercise" by the affective interests of the subject. But it is a well-known fact that most modern psychologists pride themselves on not being metaphysicians. Yet truth and psychic expressionism are easily reconciled. We shall realize this in a more practical fashion if we examine the instance of cover- or screen-memories. One of Dr. Allendy's patients once told him that she had gone to a restaurant to dine. The carpets had been red; she had noticed bowls of gooseberries or raspberries on the tables; she had been in rather a bad mood that day, etc. Struck by the important place assigned to the colour red in his patient's associations, the psycho-analyst asked her whether she had not had her menses at that time. She replied that she had indeed been pre-occupied that day with a difficult menstruation.¹ This woman's memory may therefore be envisaged from two points of view. Objectively, it is a true knowledge of the past; subjectively, it is an expression of her private preoccupations. The bad mood due to the difficult menstruation did not create a false memory of red fruit or carpets which did not in fact exist, but it determined the fixation and conservation of the memory of red objects among the innumerable details which may be observed in a restaurant. William James developed a similar theme when he described the selectivity of thought. He imagines several Americans on the same European

¹ Allendy, P., p. 56; Allendy, R. I. P., pp. 97-8.

tour. Each will relate his memories accurately, but differently, for each will have noticed what interests him. In a general way, the Anglo-Saxon pragmatists have laid much emphasis on the conditioning of cognitive operations by the subject's needs and affective states, but in such a manner as to prejudice the objectivity of knowledge, and to disturb the concept of truth. The result of this clumsy statement has been to arouse such an intellectualist reaction in psychologists of other schools that the concept of psychic expression has been almost completely ignored. In fact, pragmatism and intellectualism each only see a single side of the question. As we said above, truth and psychic expressionism are easily reconciled. A mathematical thesis is a system of true propositions, but it is also an effect of the intellectual curiosity or ambition of its propounder. Presumably, too, psycho-analysis would reap very little benefit from it.

We may conclude that the fact that the value of psychic expressionism of true knowledge has been neglected, is explained by the apparent antinomy of pragmatism and intellectualism. But that it should have been misunderstood where the dereistic products (dreams, hallucinations, and neurotic symptoms) are concerned, is stranger. Governance by the object is here excluded by definition; no one will maintain that dream-images are a true knowledge of reality. Since it is absent, truth can no longer mask the psychic expressionism. How comes it, therefore, that the latter has not been more clearly defined by the pre-Freudian psychologists? It seems to us that two causes, the one doctrinal and the other methodological, may be assigned for this deficiency. The doctrinal cause is the influence of idealism. The idealist philosophy, with its claim to reduce *being* to *knowing*, clearly cannot allow that psychic states should be treated as things between which there can exist real and unconscious causal relations. The concept of psychic expression presupposes a minimum of realism. Since the point of view of the strict logician is clearly untenable in psycho-pathology, we are forced back to organicism. Meunier and Masselon's book, *Les rêves et leur interprétation*, is a good example of the state of mind of the psychiatrists either prior to Freud or uninfluenced by him. This work was published in 1910, i.e. ten years later than the *Traumdeutung*. It does not contain a single mention of psycho-analysis; the two writers either are ignorant of it or neglect it. Their book may therefore be regarded as a good sample of pre-Freudian psychiatry. Their medical training gave Meunier and Masselon an excellent lead by making them choose the concept of "symptom" as the instrument of their work. This concept forced them to interpret that of "sign"

in a plainly objective and realist sense. In their view, the dream is an effect and a sign. But they are unfortunately unable to distinguish realism from organicism, and so seek the causes of dreams in external or internal sensory stimuli. In our terminology, we shall say that they only envisage the dream as a sign of the third group; yet they know that psychic factors have a vitally important role in the ætiology of dreams, and occasionally say so.¹ But they do not turn this observation to any account. The concept of psychic expression is palpably absent from their work, so that their interpretation of dreams consists solely in discovering their organic causes. This point of view is clearly inadequate.

The vacillation between the psychology of consciousness and organicism is not due solely to the influence of idealism. The pre-Freudian psychologists possessed no technique for the discovery of unconscious causal relations between psychic events. Moreover this gap in methodology is related to the disregard of psychic expression. Had the theoretical importance of this concept been recognized, attention would at once have been turned to the discovery of methods whereby the antecedent psychic states expressed by the actual states might be determined. The doctrinal and methodological insufficiency may be distinct, but they are hardly separable.

We have tried to demonstrate the legitimacy of the concept of psychic expression, and to explain why this very important concept had been so meagrely exploited prior to Freud. We must now inquire whether Freud and his followers have succeeded in presenting a satisfactory philosophical elucidation of this concept of psychic expression, upon which is based the very possibility of all their interpretations. Since psycho-analysts chiefly use the two concepts of *meaning* and *symbol*, we shall discuss these successively.

Why do we say that a word has a meaning? Because its enunciation is the effect-sign of an idea. The word is a sign of the second group, because it is itself material, whereas what it signifies is psychic. We cannot stop here. Language is not a series of sound-atoms signifying conceptual atoms. Relations play an extremely important part in rational thought, a fact which can be misconceived, as it was the error of the academic empiricists to misconceive it. But it can also be over-estimated, and this is where so many contemporary psychologists go wrong. For our own part, we regard the sacrifice of being to relation and of relation to being as equally unreasonable. Thus we hold that there are two degrees in the meaning of language. Words express concepts, and relations between words express relations between concepts. Once these definitions have been laid down,

¹ Meunier et Masselon, *Les rêves et leur interprétation*, pp. 183-6, 189-202.

it is quite legitimate to compare dreams to language. We must only add, as we said in Volume I, that the dream is a natural and individual psychic language. The dream is a language, because its aim is not to know, but to express. It is a psychic language, because it is not an emission of sounds, but a mental production. It is a natural psychic language, because the causal relation whereby it is derived from the psychic states which it expresses need not be known in order to exist, i.e. because it is intrinsically unconscious. It is a natural and individual psychic language, because, in contradistinction to what takes place in the natural physical expression of emotions, the relation between dreams and their substrata, while obeying certain general laws, varies from one person to another.

Freud has often compared dreams to language¹ or writing.² He often says that dreams are a "system of expression."³ Unfortunately he nowhere elucidates this concept, although it is in urgent need of elucidation, since his predecessors had almost completely disregarded psychic expression. When Freud says that dreams and neurotic symptoms have a "meaning," the word "meaning" takes on, in his writings, a fundamentally new significance. Strangely enough, Freud does not seem to be aware of this. We have just explained what correctives are necessary to the statement that dreams have a "meaning" in the same sense as language has a "meaning." Unfortunately the word "meaning" serves not only to denote the property of language to express thought, but also the property of thought to know reality and to attain truth, which is a very different matter. When we tell anyone: "What you say has no meaning," we are not claiming to criticize him linguistically, but logically; we have in mind, not the relation of his language to his thought, but that of his thought to reality. The word "meaning" has a very distinctly dual significance, neither of which can be applied without corrective to dreams or, more generally, to dereistic products. The logical significance of the word "meaning" is not applicable to dreams, which are not, strictly speaking, forms of knowledge; its linguistic significance is no more suitable, for dreams are not material things. In fact, when Freud says that dreams have a "meaning," he is giving the word a third significance, unknown until his time. He must however bear the charge of having been unable clearly to elucidate the bearing of his innovation. He continually vacillates between the logical and the linguistic significance—understandably enough, for psychic expression lies mid-way between thought and language. In consequence his work gives many people a tiresome impression of confusion. In introducing a novel idea, Freud ought

¹ I. L., p. 194; I. D., p. 130.

² I. L., pp. 194-5.

³ I. L., p. 194.

to have created a novel term for it, or at least to have used some unusual phrase, as we have done in speaking of psychic expression.

Not only does the word "meaning" acquire a new significance when we speak of the "meaning of dreams" or of the other dereistic products, but the same can be said of the word "symbol." The strictest psycho-analytical orthodoxy admits no symbolism other than collective, but most writers extend the Freudian meaning of the term, and do not hesitate to speak of individual symbolism. In the following discussion, we shall use the word symbol in this extended sense, to include individual as well as collective symbols.

In order to decide with what justice Freud speaks of symbolism in dreams, we must start from universally admitted examples of symbols. Common parlance unhesitatingly uses white as the symbol of moral innocence, and black as that of moral evil. We at once observe that the idea of a *direct* causal relation between the symbol and the symbolized is not essential to symbolism.¹ Material whiteness is no more an effect of moral innocence than moral innocence is of material whiteness. This is enough to set a gulf between the concepts of symbol and of symptom, or, as we prefer to say, of effect-sign. The symptom proves the existence of its cause; the symbol does not prove that of the symbolized. This distinction is not our own. The *Vocabulaire de philosophie* gives as meaning A of the word "sign":

Present perception justifying, more or less certainly, an *assertion* concerning something else (and not only capable of evoking a representation by way of memory or the association of ideas): e.g. a rapid pulse is the sign of fever.²

This definition clearly shows that a certain causal relation is more or less clearly implied in the strict primary meaning of the word "sign." Moreover, it is perfectly characteristic that the first example of sign should in fact be a symptom. The first meaning of the word "symbol" is thus defined: "That which represents something else in virtue of an analogical correspondence."³ Here "analogy" denotes a relational resemblance. What innocence is to the mind corresponds to what whiteness is to the body. We may say that the relation between sign and signified is based upon causality, whereas that between the symbol and the symbolized is based upon similarity.

¹ Since all resemblance requires a cause, it is clear that if the symbol and the symbolized have not a direct, they must at least have an indirect causal relation. We shall return to this question later. (D.)

² Lalande, *Vocabulaire de philosophie*, article "Signe," vol. ii, p. 768.

³ Lalande, *op. cit.*, vol. ii, p. 844.

Hence it follows that the concept of "symbol" implies an arbitrary aspect which excludes the concept of effect-sign. *It is important to guard against misconceptions at this point. We do not by any means claim that the relation of resemblance is subjective; we simply mean that it can be debased to an unlimited extent. It is always possible to discover an aspect of similarity between any two realities, be it only that which justifies the application of the word "reality" in both cases. Every being has therefore an infinite number of possible symbols, whereas it can only have a limited number of effects or causes. Resemblance itself is not arbitrary, nor are the degrees of resemblance arbitrarily ordered, but there is no limit to their number. Since any reality can be symbolized in an infinite number of ways, the concept of symbolism would appear so indeterminate that it could have no practical use unless choice intervened. But how could this choice possibly not be conscious? Symbolism, in the meaning which it bears elsewhere than in psycho-analysis, seems essentially to imply a conscious comparison. The existence of a natural symbolism, common to all races, is in full accord with our thesis. It is a normal fact that the most striking resemblances between various realities are universally observed, and are used in language in a fully conscious fashion.*

There is a final characteristic of symbolism, as it is generally understood elsewhere than in psycho-analysis, which we must now point out. The symbolic relation links the objects of representations and not the representations themselves. Let us return to the example we have already used in Volume I in our exposition of the Freudian concept of symbolism. Minerva issuing from Jupiter's skull is the symbol of the divine origin of wisdom. The symbolic relation, in the non-Freudian sense, proceeds from the object of thought "birth of Minerva," i.e. the symbol, to the object of thought "divine origin of wisdom," i.e. the symbolized. It is most important to note that ordinary symbolism does not involve the question of the genesis of ideas.

We hope that, after what we have just said, it will be readily conceded that Freud has completely modified the usual meaning of the word "symbol." Psycho-analytical symbolism constitutes the exact antithesis of ordinary symbolism. On each of the three points which we have just examined, the generally accepted and the Freudian significance of the word "symbol" are in open contradiction.

Firstly, whereas the ordinary symbol implies no direct causal relation with what it symbolizes, the Freudian symbol is essentially and by definition an effect of what it symbolizes. Jung is clearly

aware of Freud's mistake in applying the term *symbols* to dreams and to neurotic symptoms.

Those conscious contents which give us a clue, as it were, to the unconscious backgrounds are by Freud incorrectly termed symbols. These are not true symbols, however, since, according to his teaching, they have merely the role of signs or symptoms of the background processes. The true symbol differs essentially from this, and should be understood as the expression of an intuitive perception which can as yet neither be apprehended better nor expressed differently.¹

This critique of Jung's reaches the heart of the question. The fact that the psycho-analytical interpretation of dreams has aroused so much opposition is largely due to the confusion created by the use of the word *symbol* in the sense of *index* or *effect-sign*. Writers such as Meunier and Masselon, who have envisaged dreams as symptoms, have had no difficulty in getting their point of view accepted. It may be said that this was because they attributed an organic ætiology to dreams, and we must allow this reasoning a certain amount of weight. But we believe that if Freud had carefully avoided the word *symbol* and represented the dream as a psychic symptom of deep psychic states, he would have been much better understood and much less criticized.

Secondly, whereas ordinary symbolic relations, not being based upon causality, exhibit an unlimited indeterminacy which can only be ended by a conscious comparison, Freudian symbolic relations, which are based upon causality, are thereby determined and require no conscious comparison. In his description of the dream-work, Freud remains absolutely faithful to his causalist view-point; it is there that he is truly himself. But when he attempts to explain symbolism, there is a tiresome confusion in his mind between the ordinary meaning of the word and the new meaning he wishes to ascribe to it. This fluctuation of thought is clear in the following passage:

We are confronted [he writes] with the fact that the dreamer has at his command a symbolic mode of expression of which he knows nothing, and does not even recognize, in his waking life. This is as amazing as if you had made the discovery that your housemaid understood Sanskrit, though you know that she was born in a Bohemian village and had never learnt that language. It is not easy to bring this fact into line with our views on psychology. We can only say that the dreamer's knowledge of symbolism is unconscious and belongs to his unconscious mental life, but even this assumption

¹ Jung, *Contributions to Analytical Psychology*, trans. by H. G. and C. F. Baynes, Kegan Paul, 1928, pp. 231-2.

does not help us much. Up till now we have only had to assume the existence of unconscious tendencies which are temporarily or permanently unknown to us; but now the question is a bigger one and we have actually to believe in unconscious knowledge, thought-relations, and comparisons between different objects, in virtue of which one idea can constantly be substituted for another. These comparisons are not instituted fresh every time, but are ready to hand, perfect for all time; this we infer from their identity in different persons, even probably in spite of linguistic differences.¹

We see in what difficulties Freud finds himself owing to his unfortunate application of the word *symbolism* to the dream-work. He even comes to speak of "unconscious comparisons." Taken literally, the expression is contradictory. We could quote many other unfortunate dicta of this kind.

Thirdly, whereas ordinary symbolism links the objects represented, psycho-analytical symbolism links the representations themselves. Anyone but a Freudian would regard Minerva issuing from Jupiter's skull as the symbol of the origin of divine wisdom. But the psycho-analyst only studies dereistic, objectless psychic products. He therefore regards representations as derived from one another according to a strict causal relationship. He will systematically call the derived representation the symbol, and the primary representation the symbolized. Now there is no doubt that the abstract is conditioned by the concrete, that the concept is not dependent upon the image, that the intelligible is not derived from the sensible. The psycho-analyst will therefore lay down as a first postulate that the divine origin of wisdom is the symbol of the birth of Minerva. This inversion of the universally accepted direction of the symbolic relation only settles one half of the question. Agreed that, in the Freudian sense of the word "symbol," the divine origin of wisdom is the symbol of the birth of Minerva. But of what does Minerva's issuing from Jupiter's skull constitute the psycho-analytical symbol? Clearly of the antecedent representations which condition it, of which it is the effect-sign or index. The idea of birth from the skull is not primary, a datum beyond which it is impossible to go; it indisputably depends upon the idea of ordinary birth, of which it is a rearrangement. In psycho-analytical terminology, Minerva's issuing from Jupiter's skull is a displacement to a higher level of vulgar birth. We therefore reach the following conclusion: In the universally accepted meaning of the word "symbol," Minerva's issuing from Jupiter's skull is a symbol of the divine origin of wisdom. In the psycho-analytical meaning of the word "symbol,"

¹ I. L., pp. 139-40.

Minerva's issuing from Jupiter's skull is a symbol of vulvar birth. This example is a strikingly clear illustration of the opposition between the ordinary and the psycho-analytical significance of the word "symbol." It is obvious that Freud was profoundly mistaken in applying the term "symbols" to dreams and other dereistic products. Does this mean to say that psycho-analytical research is illegitimate and purposeless? By no means. The example of the birth of Minerva itself suffices to prove it. It is absolutely legitimate to inquire what are the antecedent representations conditioning the representation of Minerva issuing from Jupiter's skull. And it cannot be disputed that birth from the skull is derived from vulvar birth. The object represented ("birth of Minerva") is the symbol, in the ordinary sense of the word, of the object represented ("divine origin of wisdom"). The representation of the birth of Minerva is the index, the effect-sign, the psychic expression, the symbol in the Freudian sense, of the representation of vulvar birth.

Our examination of the explanations which Freud gives of the significance which he attributes to the concepts of *meaning* and *symbol*, allows us to conclude that his presentation of psychic expression is confused and equivocal. The schism of the Zurich school is due in large measure to the insufficient philosophical elaboration of the theory of symbolism. But we hope we have shown that in spite of this the concept of psychic expression retains its full validity, and that its field of application deserves careful investigation.

Although the admission of the validity of the concept of psychic expression leads us to maintain the legitimacy of the attempt to interpret dereistic products causally, it provides, on the contrary, no criterion of the legitimacy of the interpretation. Henceforth we may regard it as certainly true that the elements of dreams and of neurotic symptoms depend upon a psychic substructure. But is this dependence only exerted from a manifest to a latent element, the relations of the manifest elements with one another being dependent upon pure chance? Or, on the contrary, are the relations of the manifest elements with one another expressive of a complex underlying thematism? The concept of psychic expression does not tell us. The question can only be solved inductively, by examining the results of a sufficient number of interpretations recognized as certain. The problem which now arises is therefore that of the criteria of correct interpretation; it has been very much neglected by psycho-analysts, for reasons which can readily be understood. Logic and methodology are subsequent to science. The human being begins by reasoning instinctively, if we may use the phrase. It is not until later that he begins to reflect upon the mechanism of ratiocination. This is

strikingly exemplified in mathematics. Most mathematicians are incapable of logically analysing the processes they use. The validity of reasoning from recurrence is universally admitted; nevertheless logicians are still unable to agree on its exact nature. The same is true in psycho-analysis. We make our interpretations relying on certain criteria, which remain implicit, but upon which all else is based. We shall try to render them explicit.

The fundamental postulate upon which psycho-analytical interpretation is based does not in any way rely, we must repeat, upon the concepts of knowledge and truth. It consists in the assertion that in a single individual the psychic flux is not pure change; that it exhibits a minimum of stability and identity. Thus formulated, this postulate is obvious for all who admit the possibility of science. *It is simply the application to psychology of the concept of causality in Meyerson's sense of the word.*

The following example will assist us to a better understanding of the radical distinction between the psychic stability and the conscious judgment which the person may pass upon it. It is one of my own dreams, analysed the same day, the associations having been noted down as and when they were produced. I shall here only examine a fragment of it, seeking not to give a complete interpretation, but to illustrate the principle of unconscious psychic constancy.

DREAM: I see a badger in a tree; it is of a more tawny colour than badgers are in real life. It climbs down from the tree. Then fish come into the dream; the badger goes to hunt for some to eat.

ASSOCIATIONS: *I see a badger in a tree.* These words make me think of my grandmother's estate. She had often seen badgers there. Then I think of the estate of one of my aunts; they used to complain of the holes the badgers dug there. I had planned to watch for them at night and shoot them. In the end I decided against it, probably with some regret.

In a tree. I don't think that badgers climb trees. I have read stories in children's books of wolverenes climbing trees. These two kinds of animal are somewhat similar.

It is rather tawny. Badgers are grey. The fox is an instance of a tawny-coloured animal.

It climbs down from the tree. I don't remember having been afraid in my dream, nor of having fired at it, which is strange, considering my fondness for shooting.

Then fish come into the dream. The badger feeds on roots, I believe, and sometimes on small animals, but most probably not on fish. I have perhaps read something about this animal a day or two ago, but where and when?

In the course of these associations, I formulated the three following judgments, which expressed my conscious opinion.

(i) "Badgers and wolverenes are not close together in the zoological scale." I had been very much astonished to find that the badger evoked the wolverene, and had immediately reacted with a judgment against this association, which seemed to me unduly to relate two animals which I believed to be quite far apart in zoological classification.

(ii) "The badger is not tawny, but grey." I could not explain, in the waking state, why my dream-badger was tawny. I was quite well aware that the badger is grey-coloured.

(iii) "It is very improbable that the badger eats fish." Here again I thought my dream-images strange. I should certainly not have asserted, *in the waking state, that the badger eats fish.*

These associations and the reflections to which they gave rise were made the next morning. In the afternoon, being rather dissatisfied with the results of my efforts, I undertook a second analysis. The early associations contributed nothing of interest. When I reached the word "fish," I had the following associations: "The badger makes me think of honey. Wild honey. The hives in my aunt's estate. Do badgers rob hives? The death's-head hawk-moth I inspected yesterday with my son."

Since these associations on honey left me in a complete state of indecision as to the truth of a fourth judgment, i.e. "The badger lives on honey," I went to my library and took down the volume entitled *Carnivora* which is part of Dr. Chenu's *Encyclopaedia of Natural History*. This series had been given me as a boy by one of my uncles. I had been delighted with it, and had spent many happy hours turning its pages. At the time of the dream (the night of 3-4 June 1930), I had long ago ceased to take any interest in Dr. Chenu's books. My education had led me in quite a different direction; then the War, with all its distracting anxieties, had intervened. I am quite sure that for fifteen years, and perhaps even for twenty, I had hardly opened the great volumes of the *Encyclopaedia of Natural History*. I immediately recognized the drawing of the badger. On page 233, I read that the badger ate fish, and on page 234 that it ate honey. Encouraged by this double corroboration, I continued my investigations. I read on page 231 that as a cub, the badger's fur is tawny. When I reached page 239, I discovered that the badger and the wolverene are immediate neighbours in the classification followed by Dr. Chenu.

The contrast between the stability of the associative or dream-links on the one hand, and the error or uncertainty of the conscious

judgments on the other, is indeed remarkable. My associative unconscious relates the badger to the wolverene; my conscious judgment hurriedly protests, declaring that these two animals are not close together in the zoological scale: it is the conscious that is at fault. My dream-unconscious gives me a picture of a tawny badger; at the conscious level, I reject this image: verification shows the unconscious to be right. My dream-unconscious represents the badger as a fish-eater; my conscious remains doubtful on this point: its scepticism is shown to be groundless. My associative unconscious relates the badger and honey; my conscious thinks it prudent to adopt a purely interrogative attitude—thereby simply manifesting its inferiority for the fourth time.

The stability of the psychic links is independent not only of the truth of the person's conscious judgments upon these links, but also of its sincerity. Let us take the case of a patient who tries to deceive his psycho-analyst by creating a wholly artificial dream which he offers as a real dream. If in his investigation of the false dream the psycho-analyst were to adopt the evidential standpoint, he might be led into error, but we know that he must always adopt the indicative or causal standpoint.¹ The psychic products produced for him do not interest him as true or false evidence of external events, but as effect-signs of past psychic states. Whether a sum total of images has been dreamed by the patient or created by him in the waking state as a means to some end, makes no difference in psycho-analysis. This sum total of images emanates from the patient's psychism, and therefore expresses it. The American psycho-analyst Brill was once treating a physician aged about thirty, a bachelor, who was suffering from fairly deep-seated psycho-neurotic disorders. The patient used to maintain that he did not dream, whereas Brill contended that he was forgetting his dreams. One day he told his analyst the following dream: "I was giving birth to a child, and felt very severe labour pains. My friend X acted as accoucheur (midwife); he stuck the forceps into me more like a butcher than a physician." The patient explained that his friend X was a business man, not a doctor. Brill asked him for his associations on this person. The patient replied that he was a very good friend, but that he had lately drifted away from him. Brill asked to know why. He replied that he did not care for certain people with whom X was acquainted, and began to describe his friendship with X. Brill listened to him, and then pointed out that he seemed jealous of X. The patient agreed that that was exactly what X thought. Brill then told him that jealousy was only

¹ Note in passing that the whole progress in scientific police-work lies in an increasing substitution of indicative for evidential proof. (D.)

justified when someone of the opposite sex was involved, and emphasized the fact that the patient was jealous when X spoke to other men. The analysand laughed. "You know," he said, "I always thought that this dream business is claptrap. Now I can see it; you asked me to give you a dream and I thought I would make one up. I never dreamed it. I was only fooling you." Brill was somewhat surprised, but the false dream revealed what he had long been seeking. Such a psychic product could only have been manufactured by a homosexual, and Brill had in fact suspected, from the beginning of treatment, that his patient was an invert. He therefore requested him to continue his associations. The patient protested, asserting that his dream was pure invention. Brill insisted, and the analysand grew angry. At last Brill decided to use direct methods. "You are a homosexual," he told him, "and in love with Mr. X; only a man who identifies himself with a woman dreams that he gives birth to a child." The patient left in a rage but returned very soon after to tell Brill that his diagnosis was perfectly correct, but that he had found it too painful to recognize that he was homosexual.¹

However indisputable the assertion of a relative unconscious psychic stability may be, it raises more questions than it solves. If it were a case of absolute stability, the problem of interpretation would be solved forthwith. But the stability involved is quite relative. How can we exactly determine the degree of consistency in the psychic links? Two replies have been given to this question.

In order clearly to contrast the one with the other, we must refer to the classical division of associations—(i) by similarity, (ii) by contrast, and (iii) by contiguity. Associations by contrast may be reduced to association by similarity. Contraries are in fact extreme species of a single genus. We are therefore left with only two associative types—similarity and contiguity. Writers of empiricist tendencies have tried to reduce similarity to contiguity, but their reduction has generally been regarded as faulty.² Reversing their point of view, we might say that contiguity constitutes an extrinsic resemblance. Green and blue exhibit an intrinsic resemblance, for they are both colours. But now take a green-coloured square; the square and the green have nothing in common except that they occupy the same space at the same moment; their resemblance consists only in the possession of the same spatio-temporal distribution; it is purely extrinsic. It is easy to see that we have not, strictly speaking, reduced contiguity to similarity. For in everyday language,

¹ Brill, *Fundamental Conceptions of Psycho-analysis*, pp. 195–7.

² Cf. Roustan, *Psychologie*, pp. 285–8.

similarity always means intrinsic similarity. We are evidently at liberty to make the word "similarity" signify the abstract common to intrinsic and extrinsic similarity, but what is to be gained thereby? Nothing at all; for the opposition between intrinsic and extrinsic similarity still subsists. We shall therefore distinguish two irreducible types of association—(i) extrinsic (or by contiguity), (ii) intrinsic (or by similarity).

Having laid down this premise, we may say that Freud and his followers admit the almost absolute stability of associations by contiguity. When a dream-image evokes a series of other images, they believe that *the fact of the evocation alone* suffices to prove that the images evoked by the work of association are causally related (either directly or indirectly) to the image under analysis. We shall say that they regard the *criterion of evocation*, or *extrinsic criterion*, as self-sufficient.¹ This is the first answer to our question as to the consistency of psychic links.

This manner of solving the problem lays itself open to grave objections. Firstly, it seems to postulate a reversibility which is by no means evident. During the elaboration of the dream, the latent content evoked the manifest content. What proof have we that in the course of analysis the manifest content will evoke the latent content? Is it not paradoxical to maintain that the deepest levels of the repressed, which during sleep only contrive to pass the barriers of the censor under a disguise, will yet show themselves in the field of consciousness, during the analytical sessions, in their true form? If it is replied that this result will be obtained by means of the transference and the dissolution of resistances, it turns out that a new criterion is indispensable to differentiate failure from success. If reversibility, in the strict sense, is not involved, if it is claimed that both the manifest dream and the associative material which it evokes are products of unconscious complexes which may be inferred from them,² it is clear that, since the cause sought is no longer directly evoked but deduced, some criterion other than that of evocation is indispensable. Secondly, even if the foregoing difficulty did not arise, it would none the less remain true that intercurrent causes may come into play and disturb the stability of the psychic links. It must be possible to discern their intervention. Some criterion other than that of evocation is therefore necessary, if we are to avoid falling into a *petitio principii*.

These criticisms (which have become stock weapons in the armoury of the opponents of psycho-analysis) lead us to suggest a second reply to the problem of the consistency of psychic links.

¹ I. L., pp. 39–40, 84–5.

² I. D., p. 490; I. L., pp. 90–1.

Since the *extrinsic criterion*, or *criterion of evocation* is insufficient, we must have recourse to the *intrinsic criterion*, or *criterion of similarity*. All too often psycho-analysts omit to mention it, or if they do so, fail to bring out its supreme importance. Saussure, for example, writes: "Associations often lead to recent events which are so analogous to the dream-image that the most probable hypothesis is that the two phenomena are causally related."¹ The criterion of similarity is used in a number of various investigations besides psycho-analysis, from geology to scientific police-work, by way of philology, which involve the relating of a clue to its cause. The justification of its validity may be set forth as follows. Causality necessarily implies a minimum of resemblance between the effect and its cause. This is an immediate consequence of the principle of sufficient reason. To be correct, the converse must be formulated as follows: similarity implies a relation of causality, either direct or indirect.² Given two similar entities E_1 and E_2 , we have a choice between three hypotheses to explain their resemblance: (i) E_1 is the cause of E_2 (direct causality); (ii) E_2 is the cause of E_1 (direct causality); (iii) E_1 and E_2 have a common cause E_0 (indirect causality). In certain instances, this common cause E_0 is so far removed that it deserves to be called metaphysical. The existence of indirect causality lays the use of the criterion of similarity open to an apparently rather serious objection. If the problem is set in the abstract, it appears that when an entity E_1 is related to another entity E_2 by a direct causal relation, it is always possible to maintain the hypothesis that a common cause E_0 may exist. But in the case of a traumatic event and the dream-image which reproduces it in a more or less distorted fashion, it is clear that the hypothesis of a cause common to the trauma and the dream is meaningless. The criterion of similarity therefore remains perfectly valid.

The Freudian point of view, which regards the criterion of evocation as sufficient, and the critical point of view, which only admits it when reinforced by the criterion of similarity, have each their advantages and their disadvantages. With a therapeutic result in mind, Freud is certainly justified in his action. Saussure has very clearly demonstrated that the theoretical and practising psycho-analyst are pursuing different aims.³ This opposition must not be exaggerated to the point of believing that the truth or falsity of an interpretation bear no relation to its curative efficacy. A false

¹ de Saussure, "Remarques sur la technique de la psychanalyse freudienne" in *L'Evolution psychiatrique*, old series, vol. i, p. 49.

² We have already pointed this out in connection with symbolism. (D.)

³ de Saussure, M. P., pp. 177-85.

interpretation may produce a suggestive, but not a cathartic effect. Only the true interpretation can have a psycho-analytical action, but it is important to note that it draws its efficacy from its truth and not from the fact that it is demonstrated. A correct interpretation, whose accuracy the patient perceives intuitively, may give him considerable relief. Nevertheless to the logician, with his objective standpoint, the therapeutic criterion is unacceptable, and it must be recognized that the abuse of it has brought psycho-analysis to a scientific impasse.

Most thinkers who care for strict logic are left sceptical by Freudian interpretations. The second solution must therefore be adopted when demonstrative results are to be exhibited. When a purely scientific aim is envisaged, the concept of psychic expression must be limited to intrinsic association. It is important not to forget that this approach certainly eliminates a large number of true links between psychic elements. The whole doctrine of conditioned reflexes shows the importance of extrinsic associations. A perfectly satisfactory solution is impossible. There is a real antinomy between therapy and science. Either one will be unwilling to run the risk of denying the slightest actually existing psychic link (thereby running that of allowing a number of non-existent ones); or, on the contrary, one will be unwilling to risk admitting non-existent psychic links, although one may disallow a certain number that actually exist. In the present work, we shall of course adopt the critical standpoint.

It is tiresome that we can only reach exact demonstration by the elimination of true psychic links. We may, however, be able to save some of them by recourse to what we shall call the *criterion of frequency*. When an extrinsic association is often repeated in the course of an analysis, the presumptions in its favour are strengthened. Note that the criterion of frequency is not independent but complementary. Frequency is not distinct and separable from evocation, as is similarity; it is simply a modality of it.

An interpretation is not generally based upon a single evocation, even repeated, nor upon a single resemblance. It generally relies upon the convergence in the same direction of a collection of indices. Here again we have a complementary and not an independent criterion, since convergence is not a primary relation like evocation and similarity, but a modality of a collection of evocations and similarities. With this reserve, we are justified in speaking of a *criterion of convergence*. This is very closely related to the criterion of frequency, but differs from it (as we have described it) by a greater complexity. Moreover, it is difficult exactly to define the respective role of the one and the many in the realm of psychic events. It is

convenient to speak of elements and relations, but it must be admitted that there is something artificial about this separate classification. A true convergence consists in a quasi-organic whole; to interpret it in a purely quantitative manner would be to misconceive it.

The two independent criteria of evocation and similarity, and the two complementary criteria of frequency and convergence enable us to establish the causal relations between a dream-image and a memory, for example. But if the doubt applies rather to the cause itself than to the relation, if the possibility of a false memory is to be apprehended, it will be necessary to rely upon the evidence of a third person, or to have recourse to documents, photographs, etc. Since such instances involve reference, not to the psychism of the analysand, but to exterior sources, it would be quite natural to speak of "external criterion" in this connection, but this term would risk confusion with that of "extrinsic criterion" which we have used to denote the criterion of evocation. We shall therefore use the expression *criterion of verification*. Verification has been even more widely neglected by psycho-analysts than similarity.¹ Freud refers to it several times, but most of his followers dismiss in a very few lines the account of the verifications they have had occasion to make. Systematic recourse should, on the contrary, be had to the criterion of verification by anyone who aims at giving a scientific presentation of psycho-analysis.

Accurately applied, these five criteria enable us completely to dismiss the objection of arbitrariness so often brought against psycho-analytical interpretations. Difficulties raised concerning reversibility or the action of intercurrent causes, especially of suggestion, may be fully resolved. Let us suppose that suggestion disturbs the evocations, that it leads the patient to evoke in connection with a dream-image an actual memory which bears no ætiological relation to it; the absence of any sufficiently close resemblance between the elements in question will compel the really critical interpreter to suspend judgment. Let us now suppose that suggestion creates a wholly false memory which resembles the dream-image sufficiently to be its possible cause; systematic recourse to the criterion of verification wherever there is the least doubt will enable him to avoid this mistake as well. Finally let us suppose that the psychic product to be analysed is itself an effect of suggestion. It is clear that our criteria will enable the image which is the object of investigation to be related to the suggestion which has caused it. The truth of the interpretation is not at all affected by the question whether the

¹ P. L. A., p. 107; O. N., pp. 343-5 (note).

material submitted to psycho-analytical investigation is or is not due to suggestion. The work of analysis is equally objective whether the path leads back from a neurotic symptom to a psychic trauma of childhood, or from the carrying out of a post-hypnotic suggestion to the forgotten memory of that suggestion. The correct connection of present to past is a truth reaching fruition, whether that past is natural or artificial. Should one desire to work only with material free from all analytically-derived suggestion, one need merely choose symptoms or dreams prior to the beginning of treatment. It is indisputable that dreams produced in the course of a long analysis may be more or less dependent upon suggestion. But it is important to have an accurate idea of the nature of suggestion, which may be thus defined: unconscious and involuntary realization of the content of a representation. For example, a soldier becomes paralysed because, at the moment of emotional shock caused by the bursting of a shell, he had the idea that he was going to be paralysed. It is important to note that suggestion only takes place if the *actual content* of the representation is realized. If we depart from this definition, we shall include all instances of influence of the unconscious under the heading of suggestion. Now it is clear that it would be a sheer travesty to regard the generalization of a conditioned reflex as an instance of suggestion. Thus clearly defined and limited, suggestion is no more than a particular instance of influence of the unconscious, an instance which includes some of the phenomena produced in the course of psycho-analytical treatment, but not all. If, for example, during his treatment a patient reads that the analysand often dreams of his analyst, and experiences a dream of this type the following night, it will not be disputed that suggestion has played a part. But whereas the spontaneous appearance of his analyst in the dreams of a patient who is quite ignorant of psycho-analytical theory is evidence of an indisputable psychic appropriation, it is not a "suggestion" in the exact sense, otherwise suggestion would have to be made to include all dreams involving the appearance of anyone of any interest to us. Fundamentally, transference-dreams are not more artificial than those dreamt in ordinary life, and may yield valuable results if we rely on the aforementioned criteria. The Freudians' deplorable habit (which they owe, indeed, to Freud himself)¹ of identifying transference with suggestion, has largely contributed to discrediting psycho-analytical interpretations. The truth is that positive transference brings about the most favourable conditions for the intervention of suggestion, but is by no means identical with it. Suggestion may take place without transference; a typical

¹ I. L., p. 373.

instance of suggestion is Chevreul's pendulum-experiment, in which transference plays no part. Conversely, transference may take place without suggestion.

A little reflection on our definition of suggestion ("unconscious and involuntary realization of the content of a representation") will show us that Freud is justified in maintaining that the materials of dreams are alone capable of being suggested, whereas the dream-work is not.¹ Let us return to our example of the soldier who becomes paralysed because for a moment he thought he would become so. The physical fact of paralysis is the manifest content of the symptom, the idea of paralysis is its latent content, and the transition from the psychic to the somatic is the work of formation of the symptom. Independently considered, this work of formation is by no means sham or artificial. It is clear that pure artifice is something inconceivable and impossible; in every single instance, artifice is based upon an intangible minimum of what is natural. In our instance, this natural minimum is the motive power of imagery, the influence of the psychism upon the organism. It would be a vicious circle to claim that this power of the psychism over the organism is suggested, for suggestion is only possible because it exists. We now see that the auto-suggestion of a pithiatic symptom is only an extremely simplified particular instance of the influence of the unconscious. If the "suggestion-work" which transforms an idea of somatic disorder into a corresponding reality could not, without logical absurdity, be regarded as purely artificial, *a fortiori* the same will be true of the much more complex work of elaboration which uses the latent dream-materials to build up the manifest dream. The conscious information which the person may acquire of the unconscious mechanisms at work within him can never wholly resorb the unconsciousness of those mechanisms. Psyche is nature before being consciousness.

In order fully to grasp the exact role of our five criteria, we shall find it useful to make a detailed investigation of the means whereby they come into play in the two fundamental instances we have always distinguished—unconsciousness of causes (always accompanied by that of relations), and unconsciousness simply of relations. In order to simplify our exposition, we shall assume as a hypothesis a single effect derived from a single cause.

In the former instance, we start with an image I. Our aim will be to de-repress the memory M upon which it depends, and to establish the causal relation between I and M. De-repression is a true dynamic process working in the person's psychism. It is due to

¹ I. L., p. 202.

voluntary inhibition of self-criticism and self-guidance, to the dissolution of resistances and to the transference. It ends in the emergence of a forgotten memory into the analysand's field of consciousness. This emergence is usually effected by means of association, so that we find the criterion of evocation coming into play. Since the historical actuality of the memory may be disputed, the criterion of verification will settle the question by the evidence of other people, the use of photographs, documents, etc. The memory having been recovered and verified, we have now to establish its ætiological role. The criterion of evocation gives us a preliminary indication in this direction, which must be completed by the criterion of similarity, upon which the certainty of the interpretation is ultimately based. The schematic instance we are examining does not lend itself to the use of the criteria of frequency and convergence. At the most, we might speak of convergence between the results of the criteria of evocation and similarity.

We have adopted the most favourable hypothesis—that of a verified de-repression. Usually de-repression cannot be verified, and we must recognize that in that case no scientific demonstration is possible. Memory is liable to too many causes of error for us to be able to rely upon it in the absence of any confirmation. Unverified de-repressions are all too abundant in psycho-analytical literature.

The converse is to be met with: de-repression fails, whereas verification succeeds. The patient does not recover the memory of the causal trauma, but the analyst learns of its existence from his parents. The establishment of a causal relation cannot of course be based on the criterion of evocation, nor on the complementary criteria of convergence or frequency. Here again the interpretation will be justified by the criterion of similarity. A truly scientific demonstration will sometimes be attained, but on the contrary the absence of de-repression will probably hinder the therapeutic effect. Scientific success will be balanced by medical failure, or at least semi-failure.

De-repression and verification may both fail, in which case one is reduced to interpretation by pure inference. In our schematic instance of a single symptom derived from a single cause, we shall have to be content to pronounce a highly indeterminate hypothesis, relying on the criterion of similarity. If instead of a single symptom we have at our disposal a series of symptoms exhibiting a common element, the probability of a cause resembling this common element will be more considerable. In that case the criterion of convergence comes to the aid of that of similarity. We observe that the criterion of similarity may be used in two ways: (i) either the presumed cause

is directly known, and the aforesaid criterion serves only to judge the validity of the causal relation, or (ii) the cause is not directly known, in which case the criterion of similarity allows an approximate representation to be made both of the cause and of the causal relation.

The four combinations we have dealt with above (de-repression and verification, de-repression without verification, verification without de-repression, neither de-repression nor verification) exhaust our first fundamental instance—that of unconsciousness of causes. It is unnecessary to consider separately the second fundamental instance (that of unconsciousness of relations), for wherever there is unconsciousness of causes there is also that of relations. The second fundamental instance is merely a simplification of the first.

It is easy to deduce from the foregoing remarks that each of our five criteria has a very different role. Evocation furnishes both the causal event and the relation of causality, but its indications have only a probability-value. Similarity may be used in two ways: either (i) it merely serves to prove the causal relation, or (ii) it allows both the causal event and the relation of causality to be hypothetically reconstructed. Verification can only serve to establish the causal event, but gives us no information about the relation of causality. The only role of frequency and convergence is to reinforce the probability of the causal relation.

Before quoting examples to illustrate the application of the criteria of interpretation, we must answer a difficulty which naturally occurs to the mind: there is no adequate distinction between the various criteria. Let us return to the dream-image of the tawny badger we examined above. Evocation gave no result, but verification showed that many years before the dreamer had read that the badger-cub has a tawny coat. Considering the image of the tawny badger as a single independent whole, we shall say that the attribution of the origin of this dream-representation to the reading of Dr. Chenu's work is based on the criterion of similarity, or intrinsic criterion. But there is nothing to prevent us separating the badger's form from its colour; this is further justified by the fact that as a cub the badger has a tawny coat, which turns grey when it reaches maturity. Between the form of the badger and the colour "tawny" there is therefore merely an extrinsic association, a spatio-temporal conjunction. From this point of view, the presence both in Dr. Chenu's book and in the dream of the conjunction of the form of the badger with the colour "tawny" is nothing but the repetition of an extrinsic link. It is derived, therefore, from the criteria of evocation and of frequency. Our foregoing remarks on the distinction between the criteria of evocation and of similarity are countered.

In order to grasp the fallacy of this objection, we need only observe that the criterion of evocation only applies when a manifest element evokes a latent element. For this to be so in the present instance, either the independent presence of the form of the badger in the manifest content would have to evoke its tawny colour belonging to the latent content, or else the independent presence of the colour tawny in the manifest content would have to evoke the form of the badger belonging to the latent content. By relating the form of the badger in the manifest content to its form in the latent content, and its tawny colour in the manifest content to its tawny colour in the latent content, instead of relating the whole manifest image of the tawny badger to the whole latent image of the tawny badger, we raise the problem of the more or less arbitrary nature of the subdivision of an entire representation into psychic elements, but this in no way weakens the distinction between the criteria of evocation and similarity.

We are now going to apply the methodological rules we have just laid down to a series of unpublished examples. Our first case-history is an exceptionally simple one.

After a conversation with me on psycho-analysis, and in particular on the interpretation of dreams, Mme. X., a young woman aged about thirty, undertook the independent analysis of some of her dream- or dream-like products. When just awake, she would launch out on a train of spontaneous associations in a state which she herself describes as one of "semi-sleep," or "semi-somnolence," or "semi-dream." She afterwards wrote down her results and sent them to me. Encouraged by the success of her two first dream-analyses, she tackled first one and then another "waking dream." This is the account she sent me of this experiment:

Another "waking dream." Perhaps the term does not really apply here. Sometimes when I am dreaming of height (window, staircase, etc.), or when I see anyone leaning out from a high window, I experience a vision, or rather an impression of a falling body (sometimes with arms outstretched). This gives me cold shudders. . . . When dreaming of this a morning or two ago, I once more saw a *completely forgotten*¹ scene from the time when I was at most six or seven years old. One afternoon in Y Esplanade, in the town of Z, where we used to play every day, I was watching a workman on top of a ladder fixing a gas-jet to the top of a band-stand or a street-lamp, I forget which. The ladder slipped, and I was *terrified*² to see the man fall, with arms outstretched, and lie lifeless on the ground. People ran to help him, and he was carried away like a corpse on

¹ Underlined by the dreamer.

² Underlined by the dreamer.

the ladder as though it were a stretcher. Is there any correlation between these two scenes and my "dreams"?¹ This last scene had *completely vanished from my memory*.² In semi-dream, it appeared very clearly before my mind. I saw the scene once more, and now, in the waking state, I remember it perfectly. I had been frozen with terror at what I took to be the man's fatal fall.

A verification seemed necessary. I wrote to Mme. X. and asked her to make inquiries among the other people who had been present at the accident, warning her to be careful not to give her questions a suggestive turn. My letter contained all the necessary information on suggestive questions and how they were to be avoided. Some days later, I received the following reply:

As to the corroboration you asked for, I at first thought it hopeless. My mother (who had no recollection of the incident at all) never came to Y Esplanade; it was our German governess who used to take us for walks. My brother Etienne alone might have been able to remember it. My brother Louis was only four or five at the time, but I casually asked him whether he remembered Y Esplanade, and if he would tell me anything he recalled about it. He at once said: "Oh yes, the parachutes; you remember, you used to make parachutes and I was fascinated by them. And then you remember that fellow who was fixing something *on top of the stand*;³ he fell off his ladder and was carried into the chemist's shop just off the Esplanade." Here I interrupted his reminiscences, and I could have kissed him, for I had made him give me the detail that the fellow was actually "on top of the stand," for I couldn't remember whether it was the stand or a lamp-post, and now I also distinctly remember the chemist's shop down a turning. So it is true that I had forgotten the whole story, and that it was the semi-dream that suddenly called it up in connection with the impression I told you about.

Mme. X.'s self-analysis vividly clears up most of the points discussed in connection with the associative method. *All Mme. X.'s results were obtained in an intermediate state between sleeping and waking*. I have already pointed out that many psycho-analysts tended to neglect de-repression in favour of interpretation in order more clearly to contrast Breuer's catharsis with Freud's psycho-analysis. In my opinion, they are quite wrong. The artificial inducement of hypermnesic phenomena remains one of the pillars of the psycho-analytical structure.⁴ Moreover, interpretation itself is only possible through the possession of associative material. But the

¹ The letter contained the analysis of two "waking dreams"; I am here quoting only what relates to the second. (D.) ² Underlined by the dreamer.

³ Underlined by the dreamer.

⁴ de Saussure, M. P., p. 156.

preponderance of association over judgment clearly implies that the higher psychic functions, the full exercise of which characterizes the waking state, are inhibited. Another lady who also carried out self-analyses for me confirmed Mme. X.'s impressions; she too could only obtain interesting associations at the moment of awakening. Several of those whom I have myself analysed have told me spontaneously that they were conscious of being in a special condition distinct from the waking state; one of them had to make efforts to continue speaking, another was scarcely aware of my presence or regarded me as a half-dream-like figure. The latter instance raises a very serious practical problem. It is clear that psychological experimentation must not be carried so far as to become harmful to the person who has consented to subject himself to it. Here it is important to pay the very greatest attention to the diversity of temperaments and characters. We have more than once pointed out that psycho-analytical treatment was contra-indicated in the case of schizophrenics. In psycho-analytical experimentation, it is advisable to be particularly prudent and cautious when dealing with persons of schizoid tendencies, and to beware of the dangers of encouraging day-dreaming.

Inhibition of the higher psychism permits the emergence of the unconscious proper, of the deep levels inaccessible to voluntary evocation. This is quite clear in the case of Mme. X. She emphatically states several times that the memory of the accident was "completely forgotten," had "completely vanished from her memory." It therefore no longer belonged to the realm of the preconscious, to the virtual field of consciousness.

The distinction between de-repression and interpretation stands out clearly from Mme. X.'s self-analysis. The recovery of the memory leaves her uncertain about the ætiological role of the recollected event both in the observation I have related and in its predecessor in her letter: "Is there any correlation between these two scenes and my 'dreams'?" However clear an interpretation may be, the knowledge of the terms is distinct from that of the relation between them. In Mme. X.'s case, this distinction is actually carried to the point of separation. The most successful de-repression cannot take the place of interpretation.

The reversibility between the work of elaboration and that of analysis is perfectly exhibited in this case. Moreover, the work of elaboration had only consisted in the substitution for the actual memory of the accident of a free image not recognized as a trace of a past event and slightly schematized. During self-analysis, this image immediately evoked the exact memory of the traumatic scene,

recognized as such, without the interpolation of any intermediate representation. This interesting detail was given to me orally by Mme. X. in a subsequent conversation. That is to say that the action of the criterion of evocation was wholly satisfactory.

Whatever our confidence in the criterion of evocation, we must recognize that the interpretation we are examining is primarily based on the criterion of similarity. Let us suppose that the scene of the accident had only been known through the evidence of Mme. X.'s brother, and that Mme. X. herself had not been able to recall the memory of it. The interpretation would nevertheless have claimed acceptance.

The complementary criteria of frequency of evocations and of convergence of indices play no part in Mme. X.'s observations.

Suggestion has had no *disordering* role. It cannot be maintained that I had suggested to Mme. X. the psychic product which she analysed, for it existed prior to our acquaintance. Can it be said that this symptom was the result of auto-suggestion? That would be to use the word "suggestion" in the intolerably wide sense which we rejected above, whereby it becomes the synonym of influence of the unconscious. For suggestion to have taken place, it would have been necessary for Mme. X.'s shudder to have been determined by the idea (subsequently become unconscious) that she was about to have a shudder. This would be a quite arbitrary manner of representing the facts. The phenomenon analysed by Mme. X. is, in fact, a generalized conditioned reflex. It has no claim whatever to be called a product of suggestion. Was the evocation of the traumatic scene influenced by suggestion? This may be maintained without falling into absurdity. After the results obtained in her earlier self-analyses, Mme. X. hoped to succeed once more. This confidence may have facilitated the recovery of the traumatic memory. But the role of suggestion ends here; it has had no sort of disordering influence. In the period of transition between the cathartic method and psycho-analysis proper, Freud used to suggest to his patients that they should recover the traumatic memory. Later he realized that this scarcely served any useful purpose. Dream-images evoke their causes associatively in those who do not believe, no less than in those who do believe that they will do so successfully. At the time when she first started analysing her dreams, Mme. X. was more or less sceptical about the associative method. She therefore exhibited, if not actually suggestion of failure, at least absence of suggestion of success. Nevertheless she obtained a satisfactory result. I therefore believe that although it is impossible to be certain that suggestion has played no part in the recovery of her traumatic

memory, we have at least the right to hold that that role was absolutely secondary. As to the traumatic memory itself, its successful verification proves its historical reality beyond dispute. Mme. X.'s brother had never forgotten the accident he had witnessed, and the question was put to him in such a manner as to avoid influencing his reply in any way.

To conclude our discussion of Mme. X.'s case, I shall say that I regard its interpretation as certain.¹ This of course does not mean mathematical certainty, but such certainty as can be claimed in the establishment of a concrete fact.

After this diagrammatically simple example, we shall pass on to a rather more complicated analysis. Marcel is a medical student who intends to specialize in psychiatry. Having attended a lecture I had given on the methods of investigating the unconscious, he gave me an account of a dream he had dreamt four or five times at about the age of ten. This dream had left a deep impression upon him, and he had noted it in his diary, but had never found any explanation of it. I suggested that I should analyse it, and he eagerly accepted. In order to give a more concrete idea of the work of interpretation, I am going to reproduce the analysand's associations in full, as I noted them down during the session. This series of notes is not as accurate as a shorthand version, but does not fall far short of that standard. I write very quickly, with abbreviations, and in practice I can claim that I miss nothing of any importance.²

DREAM: It seems to be pitch-dark night. I go in by the W.C.'s at the bottom of the garden; I can't remember whether this was a W.C. with a septic tank or not. I go down by the hole of the W.C., and find myself before a door with red, or perhaps green panes of glass; I open it, and see a flower-bed, surrounded by a dark green border of plants leaning towards a plant in the centre—or rather, not exactly in the centre. The large central plant is leaning towards me.

I asked the analysand to repeat his dream. His second account produced the following details.

It was a big door of lozenge-shaped lattice-work, in a sort of hall with red and green lozenge-shaped paving. It was not a flower-bed in the sense of a garden, but just a flower-bed. Plants or flowers—yes, flowers rather than plants. There was one very long and tall which looked at me; all the others were turned towards the big one.

¹ Nor am I suggesting that it is at all complete. (D.)

² The stimulus-words are italicized in square brackets; the analyst's interruptions in square brackets.

ASSOCIATIONS: [*Pitch-dark night.*] Impression of the courtyard that led to the garden—rather narrow; I often felt a feeling of oppression, predominated by the fear of seeing. Impression of seeing stars. The courtyard. Chiefly an impression of blackness, night, a narrow wall, a starry sky, the moon seen behind a maple-tree. The courtyard of beaten earth, a little garden leading into the house by some steps. There was also a kitchen in the extension, a sort of extension of the house into the courtyard. I had several times been shut up in a tunnel beside the W.C.'s. This place was very dark, even in full daylight. There was a large maple-tree in this courtyard, which I had often climbed. There was a hen-roost with a sloping roof, above a little shed, a sort of triangular space above the W.C.'s; we used to make all sorts of messes, prussic acid from prune-stones. We spent many rainy days there.

[*I go in by the W.C.'s.*] I often looked down the hole. There was a large overhanging beam. I meant to climb onto it. I was afraid. Story of people drowned in cesspools. Feeling of terror. Wobbly flooring. Once the floor fell in. There were two W.C.'s side by side; when one collapsed, only the other was used. Its emptying was very difficult; there was no steam pump. I had the feeling that splendid things could be done on the beam half-way up which supported the ceiling of the W.C.'s. I often planned to hide between the beam and the ceiling at hide-and-seek. The cover interested me enormously. It had worn out and fallen in. These W.C.'s were exactly the same as those at my grandmother's house; they led into a hen-roost, a sort of recess in which broody hens were made to sit. I am mixing up the two W.C.'s; they were very similar. The wall of the W.C.'s was of crumbly stones which fell off, making a loud noise as they fell down and across the floor.

[*I find myself before a door.*] This door reminds me of two doors. The door at home leading from the courtyard to the interior of the house, which was also edged with lattice-work, and also had four transparent panes; I often did photographic work inside it. In my dream, the door had three panels, two movable and one fixed, of varnished wood. I have also a vague memory of the door at Mme. L.'s house, with lozenges of transparent—no, of opaque glass, and transparent lozenges, transparent flutings. Another door exactly like it, I think, which also had three panels, and which had a top more like the one in my dream. I remember a door like this at B., during a visit I paid with my grandmother to Mme. B.'s house, in front of a large screen with wooden studs, a long gallery, loud noise when it slammed. A door with two fixed sides in a dark passage, and the cross-light entering by a window opposite.

[*I open the door.*] I saw nothing through the door before opening it; it was opaque. When I opened it, a flood of light poured through, and a gust of fresh air. A kind of feeling first. I have the feeling of going out into open country—music, like a rustling. The wind made

the plants sway—a soft murmur. The door had one oval china handle, which creaked like a door at home. The handle was loose, it was exactly like—it moved about a nail which fixed it to its axis—as though worn out—it shook. The door was difficult to open, it stuck at the top; when opened, it made the sound of glass, like a rattling window-pane.

[*I see a flower-bed.*] In front of the door there was a long sandy path, made of sandy gravel. A slightly raised flower-bed—about fifty centimetres. The border was of very dark green plants, almost brown like ivy—as in Mme. L.'s garden, where the whole border was of ivy, which spread over the flower-bed and completely covered it, like a mound of ivy. The flower-bed in Mme. L.'s garden was round; the one in my dream was oval. Mme. L.'s was about four metres across; in the dream it was immense. Yet the garden was surrounded by narrow, enclosed walls. The flower-bed was very flat by comparison, not at all spectacular, green, with not much growing in it, a large circle of plants.

[*A large circle of plants.*] [What are you thinking of?] I was thinking that if I were an artist, I should like to paint a garden. I have seen drawings by Le Nôtre in history books, a large garden drawn as if in rose-trees; my cousin G. V. used to draw and paint rose-trees—ornamentation—very slender plants—thistles. There were drawing competitions, drawings of plants—fuchsias, quite pretty—in my grandmother's garden. There had also been in my grandmother's garden great long plants with spiral leaves, monocotyledons, lying flat—no, straighter—leaning over. There were also yuccas which alarmed me a good deal because they were prickly. I was very much amazed at these big flowers set on a broomstick. I was told that they flowered every seven years. There were two large flower-beds, one grassed over, in which the dogs were buried, another round one, surrounded by leafy grasses, fairly tall. It was dark in this corner, there was a large tree which overshadowed the whole area, and a little path running round it. A yucca in the centre, rose-trees surrounded by a holly-bush, a yucca beside it, then a phlox. A big cluster of flowers, some pinks in this bed, then some box around it, like tufts on a leafy plant. The bed was very carefully tended by my grandmother, who was very fond of it. There was another large tree—yet this bed wasn't very big.

[*The leaning plants.*] Rather like tulips, no long leaves, geranium type. The flowers were green or coloured—rather dull, I think—more like grasses—set out in a definite oval arrangement all along the flower-bed, some kinds between the border and this circle, very regular, very well raked, yet green, nothing in it, wild, yet green, very neat.

[*The central plant.*] Very large, almost bare, very long with a cluster of flowers at the top, a sort of ball, some leaves lower down, slender like a daffodil or hyacinth—taller than I am, I think—the

others about thirty centimetres high—moreover I had the feeling of being greeted by these plants—very much flattered to see the big plant bowing to me, while the little ones were bowing to the big one. Yet when I walked towards the plants, it did not move; I should have liked to be those plants, because I had the feeling that it was comfortable there—it was warm and pleasant, it was absolutely peaceful—also that it was big and that I was rather lost, yet constricted. I see myself especially in the path in the foreground; I should have liked it to look at me. I think I should have liked to have been there, to have been a plant in the middle. I see the flower-bed jutting out, higher towards where the big flower was than towards where I should have liked to be. The path in the foreground was very wide, and grew narrower in the direction of the big plant, yet my place was square. The flower-bed all round was—there were some very flat, low plants. I think that on the right they were low and bent on the left—no, more bent on the right, creepers hanging from a tumbledown, dirty, encrusted wall, pebbles in a heap in a corner.

[*The central plant.*] It seemed to hold sway over the others. I was jealous of my brother just as I was jealous of this plant, which seemed to dominate me just as it dominated the little plants. He was stronger and cleverer. Yet I obeyed him. I thought him very handsome and great—handsome, superior to me. He was always better than I in any races or jumping competitions. He was my elder brother, my sisters used to obey him, when anyone refused to obey him, he used to give us beans. No, I see nothing else.

[*The big plant leant over towards me.*] With a sort of respect; it was bowing, almost obsequiously. When I was walking down the little path towards where it was, I should have liked it to turn towards me (and in this I was disappointed), just as when I thought it was bowing to me through respect. I had come back by the front—no, I had stayed where I was, and would have liked to come back; I had not come back, I had stayed in the little side-track—no, I think not. I see the explanation too clearly, I see that I was jealous of my brother, the central plant was my brother; I wanted admiration, and was not admired; I was disappointed.

I have carefully followed the incorrect grammar of the dreamer's associations; the reader will have noticed that his sentences are often incomplete and without construction. From the logical point of view, the thought is rather disordered; the descriptions of the various real gardens and of the dream-garden are so confused that they cannot be sorted out.

The dream may be divided into three parts: (i) the descent into the W.C.'s, (ii) the emergence from the W.C.'s, and (iii) the scene of the big plant.

I shall offer no interpretation of the descent into the W.C.'s, for I believe that our stock of material does not permit us to do so with any sufficient certainty. An indisputable element is the mixture of attraction and repulsion, the ambivalence of the child of ten towards W.C.'s. We are at liberty to speak of anal complex without in any way forcing the facts. But the associations give us no information about the origins of this complex. I am well aware that an orthodox Freudian would claim to interpret the descent into the W.C.'s as a fantasy of return to the mother's womb, but my aim is to show what can be deduced from this dream by a truly critical application of the associative method. From the image of the descent into the W.C.'s, with its attendant associations, I only wish to deduce the existence in the dreamer of a curiosity about the function of defæcation, more or less compelling and counteracted by impressions of fear.

Nor shall I interpret the emergence from the W.C.'s. Here again, a convinced Freudian would not fail to rely upon general symbolism to assert that the emergence from the W.C.'s signifies birth. Relating this emergence to the prior descent, he would say that we have here a dream of return to the mother's womb followed by rebirth, and he would add that in early childhood the dreamer must have accepted the theory of anal birth. None of this can be demonstrated from the associative material at our disposal, and we must dismiss it.

As for the scene of the big plant, I think it is reasonable to accept the interpretation discovered by the dreamer himself. At first sight, one might think it was based solely upon the criterion of evocation, for the resemblance between the big plant and the brother is obviously distant. Yet in the second account of the dream, there is a rather significant phrase: "One very long and tall which looked at me." If in the dream-imagery itself the plant is "looking," in the strict sense of the word, at the dreamer, we may regard it as certain that it is a human substitute, since there is nothing to lead us to suppose that it is an animal substitute. If I had been able to verify this detail from the dreamer's diary, I should have done so, but unfortunately he had left it in his parents' house in another town. We may add, too, that if the little plants are "bowing" to the big one, and if the big plant is "bowing" to the dreamer, the origin of these movements, which are rather unusual in plants, can only be explained by admitting that they represent human beings. The affective states of the dreamer during the dream confirm this interpretation; he was flattered to see the big plant bowing to him; he would have liked it to turn in his direction when he moved away. Since the dream-plants exhibit a number of qualities which are only appropriate to human beings, we may say that their interpretation

is based on the criteria of similarity and of convergence. The decisive *point is clearly the identification of the big plant with the elder brother. It is wholly consistent with the foregoing indices.* Moreover, the characteristics of the big plant form an excellent metaphorical representation of the elder brother. "It seemed to hold sway over the others. I was jealous of my brother just as I was jealous of this plant, which seemed to dominate me just as it dominated the little plants," etc. Note, too, that the evocation of the brother by the big plant was completely spontaneous. I did not interfere with the associations in any way; I only repeated the stimulus words reproducing the dream-images, and once I said "What are you thinking of?" It is therefore plausible to admit the pre-existence in the dreamer's psychism of the link between the big plant and the brother. We have still to investigate whether suggestion could have intervened between the dream and the analytical session. The dreamer did not know much about Freud's theories, and very probably the principal source of his knowledge on psycho-analytical subjects was my lecture on the methods of investigating the unconscious. After the lecture, in the course of conversation I told him Ferenczi's patient's dream of the little white dog. The reader will remember that in this dream the dog represented the analysand's sister-in-law. It is legitimate to inquire whether this example of the representation of a person by an animal may not have directed my dreamer's mind towards the representation of a person by a plant. Thus the evocation may have been more or less influenced by suggestion. It is clear that the interpretation of this dream ultimately brings us back to the criterion of similarity. The behaviour of the dream-plants is human, therefore they are human substitutes. That is the fundamental argument upon which the whole interpretation is based.

In conclusion, we shall say that as far as its first two sections are concerned, the analysis of this dream only leads to the asseveration of an anal complex. The third section bears a very plausible interpretation, in which the big plant appears as the substitute for the elder brother, but it has not been possible to obtain strict proof of the accuracy of this interpretation.¹

Let us pass on to another example. One day I met one of my old mess-mates in the Navy. Our conversation very soon became intimate. When he knew that I was interested in psycho-analysis, he confessed that he was in a very difficult situation. A woman whom

¹ Those who might charge us with excessive critical scrupulosity will enjoy reading Charles Baudouin's chapter on birth in his excellent work, *The Mind of the Child: a Psycho-analytical Study*, pp. 149-58. There they will find some curious examples of dreams of return to the maternal womb and of rebirth in connection with jealousy-complex towards brothers and sisters. (D.)

we shall call Louise, who was faced with a sexual crisis, had taken him as her confidant; he felt himself very ill-equipped for the part, and thought it dangerous. With a view to investigating his fundamental dispositions, I asked him whether he had had any dreams the night before. He began by replying that the dream he had dreamt was quite unrelated to the problem with which he was preoccupied. I pointed out that the interpretation was my business, and he told me the following dream.

DREAM: I am with a monk, and I sort of bind myself to devote my life to the care of lepers.

ASSOCIATION: [*A Monk.*] A Capuchin I once knew, Fr. Anselm. Idea of austerity. A priest who once directed me in all my difficulties, the abbé Etienne.

[*Bind myself.*] I have accepted an attitude of intimate friendship towards a woman who is passing through a moral crisis.

[*Lepers.*] Rémy de Gourmont, who was supposed to be one. One of this writer's novels, *Un cœur virginal*.

I pointed out to the dreamer that in the writings of Christian moralists leprosy is a classical symbol of sexual sin. He told me that he had never thought about it, but that it seemed to him perfectly plausible. I then suggested that he should regard his dream either as a wish to hand over his role of moral adviser to someone else, or as the intention of adopting a more reserved, less sentimental attitude towards the lady in question. The second interpretation seemed to him more plausible.

Some days later, I received a letter from him containing further explanations, written successively on the day after our talk and the next day.

Here are the new details dated the day after.

SECOND ACCOUNT OF THE DREAM: I was dealing with a religious who seemed to me to be dressed in a brown fustian habit like that of the Capuchins. I found that I had entered into some kind of engagement with him to look after lepers. I think this obligation distressed me, but I believed I could not get out of it.

This second account is not substantially different from the first; the additions it makes to the dream-content are the description of the habit of the religious and of the dreamer's feelings. It may be presumed that these two additions have passed from the associations and the interpretation into the memory of the dream itself. Against this hypothesis might be quoted the fact that the naval officer's notes were written out the next day, whereas mine, from which I have taken the first account of the dream, were not written until three days after

the analysis. Later on we shall see that the question whether the monk was dressed in brown fustian like a Capuchin or not has a bearing upon the interpretation.

After having recalled his associations, which tallied exactly with my notes of them, my correspondent added in connection with my remark on the symbolism of leprosy:

I am struck by another no less significant detail. Leprosy is a disease which infects those who tend it. The symbolism is clear enough, I wonder why it did not occur to you? But now the moral implication of my dream becomes strangely involved! Now it seems much rather to symbolize the thought that, through fidelity to an undertaking approved by a man in holy orders, I am going to tend a disease which I have every chance of contracting myself. An event now comes to my mind which might clearly have inspired this thought: the abbé Pierre declaring that I was performing for Louise an indispensable service which no one could perform in my stead. It is even true that later the thought occurred to me: how can he be unaware of the danger which such a position holds for me? Here, I think, is the very root of my dream laid bare. Note that I have discovered the *thought* symbolized more or less indisputably. Now is this dream based upon fear, or desire, or the need of excuse? I don't think we have any grounds for deciding between these hypotheses.

Here is the post-script which he added the next day.

I see I have left out a detail. The first image which my dream-religious evoked in me (even before that of Fr. Anselm, I think) had been that of the monk in "Thais," as I had seen it played in the theatre at Toulon. The role of this character, who wants to save the sinner Thais and succumbs to her charms, presents a very clear analogy with the risk I am running. This seems so fundamental (note that the image of the actor is the only one that *physically* resembles the religious in my dream: dressed in fustian like him, and also, I think, tall like him—but as regards this last point I am not sure I am not rendering the dream image more precisely than it was) that one might be tempted to seek the true source of the dream in this direction. Might there not have taken place a sort of fusion between the image of the monk in Thais and the thought of the abbé Pierre binding me to play the part of a healer?

Against this analysis one might raise the objection that I had influenced my old friend by suggestion, first by laying down the principle that dreams lead to the intimate preoccupations of the dreamer, and then by proposing to regard leprosy as a symbol of sexual sin. This dual difficulty compels us not to build on the founda-

tion of the criterion of evocation, but it could be of no weight against the criterion of similarity unless the various recovered memories were false. To admit this would be to overstep the bounds of the influence normally ascribed to suggestion. Moreover, the abbé Pierre's overtures to my friend to encourage him in his role of redeemer are an established fact, and form the kernel of the interpretation. The officer dreams that he enters into an undertaking, in the presence of a religious, to tend lepers. Moreover, some days before the abbé Pierre had encouraged him to look after Louise. It is plausible to suppose that the conversation with the abbé Pierre is the origin of the dream-conversation with the religious. The undertaking to tend lepers, too, although in itself absurd and inexplicable, is perfectly understandable if we admit the symbolism of leprosy, a symbolism of which the dreamer had not thought, but of which he was perfectly well aware, as I was able to discover. Finally, if the accuracy of the dream-memory is admitted, the habit of the religious may quite easily be related to the monk in Thais and so to the sexual peril. The interpretation is therefore based on the criteria of similarity and of convergence, and even, so far as the fundamental point of the conversation with the abbé Pierre is concerned, on the criterion of verification. Here again I think we may without exaggeration conclude that the interpretation is, if not actually demonstrated, at least well grounded.

Hitherto we have quoted examples of cases not involving continuous and regular psycho-analysis, whether dealing with therapy or training, but only one or more investigatory sessions. We shall now have to show that it is possible, even in a long series of psycho-analytical sessions, to obtain interpretations which do not incur the charge of arbitrariness. Whereas the transference is (in a certain very limited sense) what may be called an artificial phenomenon, the interpretation of transference-dreams may nevertheless be logically valid. Let us try to give an example of this.

Emily is a girl who fell violently in love with a colonial civil servant, whom we shall call Gaston, during one of his leaves in France. Although married and the father of a family, he amused himself by flirting with the girl, allowing her to toy with the idea that he would obtain a divorce in order to marry her. He went back to his post in Africa, and made no further mention of divorce; Emily fell into a state of nervous depression, with insomnia and loss of weight. After hesitating for some months, she made up her mind to invoke the aid of psycho-analysis to dispel her hopeless love. An ambivalent transference was manifested from the very beginning of treatment, and Emily exhibited marked resistance in submitting to

its analysis. At the thirty-first session she brought the following dream, of which (rather exceptionally) she had made a written note.

DREAM: In a passage at the house of some friends. The friend to whom I am speaking interrupts me to greet a visitor to whom she introduces me (a breach of formality which surprises me). The man is short and thick-set, with a black moustache. We have a long and interesting conversation. Then the girl (I can't explain how she appeared) who has a better claim to him (she has known him better and longer than I have) takes us off for a walk. They monopolize the conversation. From time to time he very politely tries to bring me into the conversation, but I accept his overtures with a bad grace. I want to go away and leave them alone, since they enjoy each other's company so much. But each time I am about to move away, he politely calls me back. The walk is endless; he chats to everyone in the same charming manner, which offends me. He is a great talker, and makes friends everywhere. We visit some ruins. I know them very well, much better than the girl, and could give him a detailed account of them. But I intend to keep my lovely, precious knowledge to myself. Up to her to utter the platitudes which he seems to enjoy so much. I have set myself at her side, but several times he moved between us, so as to be near us both. Why doesn't he let me go once for all? It is too agonizing for me to have to watch them. Why can't he leave me alone?

Now we are on a boat, on our way to Africa. I am standing in the long gangway, miserably waiting for him to pass my way, so that I can see him without seeming to seek him out. He talks to everyone. All other people's concerns interest him. He is also very good to me. He is always trying to draw me out of myself, out of my sulky disdain, and to include me with the others. But I prefer being alone, even if I may have to miss seeing him thereby. I look out at the view. Once he comes to me and says "Why are you here all alone? Come with me." But I refuse, because I shall not be alone with him. I am very sad. I contemplate suicide in order to punish him. Then he will know how much I loved him, and will not travel about on ships, chatting to girls. On another occasion, as he passes by, he looks at me very tenderly and says "I love you more than you dare believe." This fills me with happiness. I no longer want to die. He seems to me good—oh, so good!—and I don't care how much he chats to girls. It is very late. Everyone has gone to bed. No, not everyone, for the gangways in which I am standing are still full of various people. I mean to stay here all night long to taste my happiness. At that moment he comes towards me, gazes long at me, talks to me, then at a certain moment, quite unobtrusively, he imprints a long kiss on my lips. I have a strange feeling, pleasant but strange, very unexpected. He does the same again. Someone calls him. He goes away. I stay behind, leaning on the rail and

thinking of Gaston, with whom I am suddenly passionately and sweetly in love, after having betrayed him. But I am waiting for the other. Intense joy at being on the same ship, and going to the same destination—Africa.

This absolutely classical transference-dream is very easy to interpret. The friend to whom the dreamer first seems to be speaking made her think of a girl with whom she is intimately acquainted. The figure of the man who plays such an important part in the dream first aroused in Emily the memory of a chance visitor; later she said she was afraid of following a false trail, for his physical appearance might seem to point to the analyst, who is in fact short and thick-set, and wears a black moustache. Asked to explain why she thought this trail false, she gave two reasons: firstly, she did not consider the ending of the dream "in conformity with the truth that was in her"; secondly, she reminded the analyst that when discussing her resistances a few days before, he had told her that, owing to the time he was devoting to her, he could not undertake another much more serious case. She had been wounded by this information, to which she attributed extreme importance; moreover, she is exclusive and jealous in all fields, and felt sure that this was what had determined the dream. The analyst replied that the identification of the girl who was her companion in the dream-walk with the patient whom he had had to decline to treat, seemed to him quite sensible, but he did not see how that prevented the dream-man from representing himself. Emily objected that certain characteristics of the dream-figure did not fit the psycho-analyst: the dream-man was friendly with everyone, whereas she thought the analyst must have very few friends in the full sense of the word; the dream-man was particularly sweet and charming to her, whereas the analyst treated her harshly and coldly. To this the analyst replied that the special characteristics were wish-fulfilments: she was representing him to herself as she wished him to be. The interpretation of this dream on the transference-level is based on the following foundations: (i) The dream figure called up the psycho-analyst in Emily's mind. She rejected this interpretation, but we know that the criterion of evocation is based on the stability of unconscious psychic links, and not on conscious judgment. (ii) In previous dreams the principal figure had often represented the analyst; the criterion of frequency might therefore lead us to expect to find him here. (iii) The physical features of the dream-man (short, thick-set, black moustache) exactly fit the analyst (criterion of similarity). (iv) The identification of the dream-girl with the neglected patient likewise leads us to regard the hero of the dream as a substitute for the

analyst (criterion of convergence). It is quite characteristic of the affective logical distortion of the resistance that Emily should have treated this as an objection to the identification of the dream-man with the analyst. (v) The subsequent evolution of the transference no doubt constitutes the most convincing argument. If this dream were really a transference-dream, it would encourage the anticipation that Emily would soon detach herself from Gaston through a violent positive transference to the analyst. That is what in fact happened. (vi) In the light of these events subsequent to the dream, certain of its details take on their full significance, and so come to reinforce the proof by convergence. The fact that the love-scene took place on board ship on the way to Africa, is due to the further fact that the wish to rejoin Gaston was being discharged in transference. The ambivalence of the end of the dream, in which Emily was shared between Gaston and the dream-figure, is further evidence tending in the same direction.

Let us now inquire what part suggestion may have played here. If we ascribe great efficacy to suggestion, we may suppose that it is partly responsible for the latent content, i.e. for Emily's transference-love for her psycho-analyst. We may also suppose that the manifest content, i.e. the appearance in the dream of a figure resembling the analyst, is likewise to a certain extent dependent upon suggestion. But whatever concessions we may be ready to grant to the hypothesis of suggestion, they could not destroy either the dream's value as a diagnostic or prognostic element, or the natural and unconscious quality of the dream-work.

Whatever influence suggestion may have exercised in Emily's treatment, this dream indisputably pointed to the fact that she was detaching herself from Gaston. This might already have been guessed from earlier dreams which, owing to the patient's resistances, were the only means of following the evolution of her sentiments. This example shows that, as we said above, the truth of the psycho-analytical interpretation is independent of the question whether the psychic product under investigation is natural or artificial. We must go still further: this dream enabled us to predict that Emily would continue to detach herself from Gaston more and more completely, as indeed actually happened. Carrying the hypothesis of an active part played by suggestion to its furthest limits, it will be objected that this more marked detachment was due to fresh suggestions subsequent to the dream, which impairs the value of the latter as an element in prognosis. To this we may answer that the dream quite certainly indicated a tendency to more complete detachment, and that every tendency may be either encouraged or counteracted by

various causes. Prognosis is never infallible—less so in psychology than in any other field. All that we can require of a prediction is that it should indicate the general direction of an evolutionary process, granted the approximate stability of the attendant circumstances.

The work of elaboration of Emily's dream exhibits characteristics which preclude us from ascribing it wholly to suggestion. The girl was in fact quite unaware of the laws of prologue-dreams which her dream-psychism rigorously applies. Freud has pointed out that many dreams may be divided into two parts—prologue-dream and principal dream.

It often seems [he writes] as though in the two dreams the same material were presented from different points of view; this is certainly the case when a series of dreams, dreamed the same night, end in a seminal emission, the somatic need enforcing a more and more definite expression.¹

Emily's dream comprises two distinct parts: the former (i.e. the prologue) takes place on land; the latter (i.e. the principal dream) at sea. The prologue-dream expresses, in a veiled and cautious manner, the erotic impulse which is clearly and indisputably manifested in the principal dream. In the prologue-dream, the analyst talks to Emily, politely calls her back each time she is about to go away, and several times comes between her and her rival so as to be equally near each of them. His attitude does not go beyond kindness and fair treatment. In the principal dream, the situation is going to change. The rival has disappeared, and will not reappear. The dreamer is on the way to Africa, the home of the man she loves. The analyst first says to her, "Why are you here all alone? Come with me." She contemplates suicide in order to show him how much she loves him. Then he looks at her tenderly and says, "I love you more than you dare believe." Finally he imprints a long kiss on her lips. Is not this series of various scenes a typical illustration of Freud's law: "The physical need is expressed progressively and ever more clearly"? Now this law had not been explained to Emily in the previous analytical sessions; everything points to the fact that she was unaware of it. We are therefore at liberty to believe that the structural dualism of this transference-dream, and the progressive unfolding of the scenes of which it is composed, are natural and not artificial.

In the case we have just examined, the de-repression is almost wholly eclipsed by the interpretation. Although the transference

¹ I. D., p. 302.

plays a large part in continuous psycho-analyses, it would be a mistake to suppose that it fills the entire stage. Since it has to be liquidated before the end of treatment by reduction to its final historical roots, we may say that the work of de-repression has the last word. Here are two characteristic examples of de-repression taken from a training analysis which in fact had a real influence on the character of the analysand.

At about the twelfth month of the analysis, in connection with the theme of the fear inspired by maternal injustice, the patient recovered the following memory:

I am with my twin brother; we are not quite two years old. I see quite clearly the flower-bed in front of the peach-trees climbing up a wall, sheltered by a shed. My twin brother goes down on hands and knees to bite a big tomato. My father comes up and strikes us so violently that my mother cries out: "You're mad; you'll kill them!" My grandmother comes from before the wood-house, with both hands clasped to her head, distraught at my father's violence.

This incident had completely escaped the patient's memory, and returned more than forty years later. On his questioning her, the analysand's mother confirmed the event, with the rectification of a detail: it was not a tomato, but a huge strawberry. The mistake is easily explained by the similarity in colour; moreover the strawberry and tomato-beds were only divided by a path about fifty centimetres broad.

Here is the same patient's second memory, likewise recovered in the course of analysis:

At vintage-time, I was just two. We had a sister whom my father adored. She was two years older than we. We are all on the terrace in front of the house. On the left there is a large rockery, of fairly tall stones. My father is holding me in his arms. He preferred me to my twin brother. I didn't like his kisses much, for his beard pricked me. My sister had managed to poise herself on one of the stones of the rockery. She falls from it. My father, distraught at the sight of her fall, throws me from him in order to go to her help. The terrace sloped away in a very steep grassy bank, planted with pine-trees. I roll down this bank to the foot of a pine-tree. My mother comes to my help. I can see my sister with a wound on her forehead.

The accuracy of this memory is confirmed by the star-shaped scar on the forehead of the analysand's sister. Moreover his mother also bore witness to the accident.

Other memories which the same patient recovered were not confirmed by his mother—in particular, none of his memories concerning infantile sexual curiosity. An opponent of psycho-analysis would conclude that these were false memories due to the suggestion of Freudian dogma. A Freudian would retort that the mother, imbued with rigoristic morality (as is indeed the case) must have repressed these unpleasant stories. Since we possess no evidence of this repression, the reader must be good enough to excuse us from vouchsafing our opinion.

II. The Symbolic Method

Our long examination of the associative method will allow us to consider the symbolic method much more briefly. We must never lose sight of the fact that, as Freud has constantly repeated,¹ the symbolic method plays a wholly secondary part in psycho-analysis. It is astounding to find that in spite of Freud's reiterated protestations, the public—even the scientific public—too often only regards psycho-analysis as a key to dreams.

Let us recall that symbolization, in the strict Freudian sense, must not be confused with dramatization. In dramatization, transition occurs from an abstract idea to an image; in symbolization, from one image to another. Moreover the symbol has a collective value.

There are two stages involved in the investigation of the validity of the symbolic method. Firstly, we must inquire how a list of symbols may be established; secondly, we must specify the criteria which justify the symbolic interpretation in a given case.

The objection may perhaps be raised that we have inverted the logical order of the problems. The validity of the symbolic interpretation, says the critic, must first be established in a certain number of specific cases, and general statements may be advanced later.

This objection is based upon a serious confusion which it is important to dispel. A relation of causality may be reached in two very different ways. Firstly, the relation of causality has an intelligible value, and presents itself forcibly to the reason. It is enough to compare the form of the imprint left by a bare human foot on wet sand, with the form of the foot itself, to grasp the relation of causality intuitively, even if we only possess a single imprint. We have seen that in favourable circumstances the associative method led to certainty of this kind. Secondly, the relation of causality is not directly comprehensible; its existence can only be demonstrated

¹ I. D., p. 341; I. L., p. 127; O. D., pp. 105–6.

statistically.¹ It is thus that the Greek physicians recognized that orchitis might be a complication of mumps. It was not either invariably or solely associated with mumps, but it was exhibited more frequently by men suffering from mumps than by men in general. The compiler of the first book of the *Epidemics* in the Hippocratic collection does not explicitly state the logical principle of comparative frequency, but his assertion is nevertheless based on that principle.² Here the causality is grasped by means of the law governing large numbers; it could not be certainly perceived in a single instance.

The same is true of dream-symbols. The list of them can only be established by the examination of a very large number of instances. Non-sexual cœnesthetic symbols have raised no difficulties. The writers who have maintained their existence have published no statistics to support their assertion. For example, Delage writes:

In many instances, dreams determined by cœnesthetic impressions bear no resemblance to the latter, or so distant a resemblance that the relation of causality can only be recognized by the constancy of the relation of succession.³

Meunier and Masselon, after having quoted a certain number of examples in the course of their work, conclude:

The vision of red, whether motionless or in movement, emotionally indifferent or terrifying, is met with in the premenstrual phases, in cardiac affections, in premeningitic states, in inflammatory conditions of the eye, and in the aura of epileptic seizures.⁴

Results of this kind have been accepted without dispute, but when Freud ventured to assert that the ticking of a watch or a clock "is comparable to the throbbing of the clitoris in sexual excitement,"⁵ no one was ready to believe him. Yet it is illogical, when one admits that the proprioceptive sensations of all parts of the body have comparatively stable dream-symbols, to make an exception in favour of genital sensations alone. There is only one means of closing the discussion—to have recourse to the statistical method. If images of the ticking of watches and clocks are more frequent in women's dreams when accompanied by clitoral excitement than in women's dreams in general, we shall be forced to recognize that these images are a typical sexual symbol. The same

¹ We may regard the orthodox inductive methods as simplifications of the statistical method in certain privileged instances. (D.)

² Cf. Sigerist, *Man and Medicine*, pp. 99–101. ³ Delage, *Le rêve*, p. 167.

⁴ Meunier and Masselon, *Les rêves et leur interprétation*, p. 210.

⁵ I. L., p. 226.

process is clearly applicable to the verification of all the other symbols. Unfortunately the psycho-analysts (at least, so far as I am aware) have published no statistics in support of the Freudian list of dream-symbols.

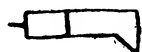
Freudian symbolism can be indirectly confirmed by the study of language, myths and folk-lore. Psycho-analysts have made fairly frequent use of the linguistic argument. It is founded on a dual basis—firstly, the unconsciousness of linguistic process. As Victor Henry pointed out so long ago, in his *Linguistic Antinomies*, language evolves without the intervention of the consciousness or reflected volition of the people who speak it.¹ The second basis is the striking resemblance between the descriptive relations of the words designating the genital organs and the Freudian symbolic relations. Sometimes the same word designates both the genital organs and the objects similar to them in shape; sometimes the same root is to be traced in the words designating the genital organs and the objects similar to them. If, for instance, we consult Monier Monier-Williams's *A Sanskrit-English Dictionary*, we find that the word *danda* means first "stick," then "penis." Similarly the word *vetasa*, whose first meaning is that of "wand," is metaphorically applied to the "penis." The word *yonī* means first the female genital organ, then "source," "origin," and finally "receptacle." The word *koṣa* has as its first meaning "recipient," and as its second the female genital organ.

Examination of the evolution of ideograms shows that they begin as very close copies of reality, become progressively stylized, and end as symbols which would be unrecognizable if one were ignorant of their history. An elaboration of this kind is first met with in Assyrian writing. Since it is exhibited in all signs, and not particularly in those designating sexual objects, it is clear that it is not due to an increase of modesty. It is certainly to be explained by the substitution of clay for stone, but Assyrian scholars have not as yet contrived to deduce the laws of evolution of cuneiform writing. Here it is pertinent to quote Freud's own view that symbolism is "a second and independent factor in dream-distortion, existing side by side with the censorship."² We shall simply quote a single example. The word *zikaru* (= "male") is first represented by an ejaculating penis. This phallic design evolves, ending in two signs which bear no resemblance at all to the male organ.

¹ Victor Henry, *Antinomies linguistiques*, pp. 64–77. Cf. Flournoy (senior), *Nouvelles observations sur un cas de somnambulisme avec glossalie*, pp. 146–7. From the *Archives de psychologie*, vol. i, No. 2.

² I. L., p. 142.

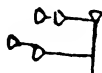
We cannot give the linguistic argument in favour of Freudian symbolism as full a statement as it deserves, for that would require a whole volume. Moreover the psycho-analysts have often, though in a more or less fragmentary manner, tackled this subject. Unfortunately the style of their writings is such as to produce an intensely repellent effect on readers with a taste for intellectual sobriety. Yet they contain valuable material. Let us hope that some psycho-analysts skilled in language (and above all endowed with undeviating critical good sense) may definitively establish the relation between the science of language and the psychology of the deep levels of the unconscious.



Sumerian form,
Beginning of the third millenary.



and



Assyrian forms, 7th century:

(From François Thureau-Dangin, *Recherchés sur l'origine de l'écriture cunéiforme*, Part I, pp. 5-7, number 26.)

Hitherto we have only discussed observational proofs of Freudian symbolism. It may likewise be demonstrated by means of experimentation. From the deontological point of view, we must express certain reserves on the experiments we are about to quote. In 1912, Schrötter suggested to hypnotized subjects that they should dream of certain sexual events in a distorted form. Sometimes the sexual image reached the manifest content of the dream unchanged; in other instances it appeared in an absolutely typical symbolic form.

Thus, following the suggestion that the dreamer should dream of homosexual relations with a lady friend, this friend appeared in the dream carrying a shabby travelling-bag, upon which there was a label with the printed words: "For ladies only." The dreamer was believed never to have heard of dream-symbolization or of dream-interpretation.¹

In 1923, Roffenstein published the results of identically similar experiments, of which the following are two examples.²

DREAM-SUGGESTION: Fellatio with the dreamer's old employer, Mr. X.

DREAM: I am sitting in the kitchen; the bell rings, and my em-

¹ I. D., p. 361. Schrötter's work appeared in *Zentralblatt für Psychoanalyse*, ii, 1812.

² *Zeitschrift für die gesamte Neurologie und Psychiatrie*, p. 87, 1923.

ployer summons me. I go into his room. He asks me to sit down on a chair. I see a number of bananas on the table. My employer invites me to eat some. I take one and peel it. I thought it quite good.

The second example is no less typical.

DREAM-SUGGESTION: Coitus with the dreamer's father.

DREAM: I dreamt about my father, who seemed to have given me a big trunk, a cabin-trunk. At the same time he gave me a key—a very big key too. It looked like a front-door key. Meanwhile I had a feeling of anxiety, and at the same time was astonished that the key was so big; it couldn't fit. Later I opened the trunk, whereupon a snake darted out, right at my mouth. I cried out loud, and woke up.

Roffenstein of course chose a subject who knew nothing of psycho-analysis.

In order to avoid the use of hypnosis, and especially of suggestion that the subject should dream the given topic in a distorted form, Betlheim and Hartmann made use of a different technique, the results of which they published in 1924.¹ They chose patients suffering from Korsakoff's syndrome, made them learn by heart prose passages of a grossly sexual character, and asked them to repeat them after varying intervals. The distortions observed in the reproduction were sometimes associative displacements, sometimes (especially in the case of sexual material) typical symbolizations.

PROSE PASSAGE: A girl went for a walk alone in the country. A young man came up, attacked her and threw her down; the girl defended herself unsuccessfully; the young man lifted up her skirts and introduced his erect penis into her vagina. After coitus had taken place, he left her in tears and fled.

A PATIENT'S REPRODUCTION: Two girls were going up a staircase, followed by two boys who also went up the staircase. In the end they married the girls because one of them was pregnant; the other returned home.

Climbing a staircase is a well-known Freudian symbol of coitus.² Another patient, in her reproduction, replaced the set phrase "introduced his erect penis into her vagina," by "introduced the knife into the sheath." The French translation does not give an exact idea of this example, for the same word *scheide* was used to designate both sheath and vagina. Some days later the patient was again asked to repeat the story, and replied "her pricked him with

¹ *Archiv für Psychiatrie*, p. 72, 1924.

² I. D., p. 337 (note); I. L., p. 132.

a knife"; and still later, "they fired at her." A third patient, in her reproduction of the story she had learnt, replaced the words "erect penis" by "cigarette."

In 1925, Nachmanson published some further experiments in symbolic dreams.¹ His experiments had been the same as Roffenstein's, and had yielded the same results.²

An *a priori* argument may be added to the observational and experimental proofs of Freudian symbolism. If real geometrical or mechanical similarities exist between the sexual organs and natural or artificial objects, such similarities must be translatable by the formation of common abstract concepts as well as of associations by resemblance—concepts and associations which we shall discover in the widest possible variety of peoples. We shall not dwell upon this point, with which we dealt in Volume I. If there is an order of nature and a human mind, there is also a collective symbolism.

It is not sufficient to establish a list of dream-symbols; we must also, when confronted with a dream-image capable of bearing a symbolic meaning, show that it does so in fact. This concrete problem is closely akin to that with which we dealt in our examination of the criteria of associative interpretation. In order to resolve it, we shall distinguish two cases.

In the first case, the list of typical symbols merely provides the psycho-analyst with a working hypothesis; the patient brings up associations, and these associations lead to the solution. It is clear that on this hypothesis we cannot speak of an independent symbolic method.

In the second case, however, on which Freud has laid much emphasis, the patient either furnishes no associations at all, or insufficient ones.³ The interpretation then rests, in its first approximation, on the list of typical symbols, and conclusively upon the thematism of facts and circumstances, failing that of associations. It is clear that this case is extremely unfavourable from the point of view of the application of proof.

In the first case, the five criteria we have formulated may be used exactly as in classical associative interpretation.

In the second case, our hypothesis excludes the criteria of evocation and of frequency of evocations, so that we can only rely on the criteria of similarity, convergence and verification, applied to a non-associative material.

¹ *Zeitschrift für die gesamte Neurologie und Psychiatrie*, p. 98, 1925.

² I have taken the account of these various experiments from Heinz Hartmann, *Die Grundlagen der Psychoanalyse*, pp. 107-8.

³ I. L., p. 125; I. D., p. 335.

We shall attempt to illustrate these methodological principles by quoting two unpublished examples. Here is a dream-fragment containing a typical Freudian symbol, the interpretation of which, *however, was obtained by the associative method.*¹

At the ninth psycho-analytical session, a married woman brought the following dream, the opening of which alone is of any interest to us here. We have not reproduced the sequel of the dream, which, although throwing an important light on the analysand's complexes, has no bearing on the problem of symbolism.

DREAM-FRAGMENT: We were—someone or other and myself—at some sort of fair. We wanted to go to the refreshment-stall. Instead of tea, we were offered goat's milk. We had been to see the goats milked; there had been a great deal of milk spilt on the ground.

[Do you see any incident of the day before connected with the dream?] No. [You didn't by any chance visit a confectioner's yesterday—Sunday?] Yes, I did. [Did you drink milk?] No, chocolate; there's no connection there.

[*Fair.*] Some sort of holiday, vague memory with that girl—oh, yes! [Go on.] No it wasn't that, etc. . . .

Here I break off the chain of associations, which are concerned with the latter part of the dream, which I have not quoted. During the session the analyst told the patient, in connection with an unpleasant topic, that she had better take the plunge bravely, whereupon she exclaimed, "Oh Lord!" sprang from the couch as though hurled from a catapult, and put on her coat with the words "Nothing doing." The analyst insisted that she should not go before the end of the hour. She refused to lie down; he told her to sit; she sat down and remained silent. Owing to this resistance, he suggested that she should revert to a previous dream; she agreed, and the hour ended thus.

At the tenth session, the patient discussed other things. At the eleventh, the end of the dream which we left unquoted again came up for consideration; when the time came to leave, the patient was showing clear signs of emotional shock. At the twelfth session, she continued her resistance. At the thirteenth, she brought a dream in which the analyst said to her: "I let very little fall." In her second account of the dream, she added that she said to the analyst: "Luckily that's over." Her associations on these words led her to admit that she had concealed something in connection with the dream in the ninth session. She burst into tears. At last she made up her mind

¹ The stimulus-words are italicized in square brackets; the analyst's other interruptions in square brackets. (D.)

to confess that the reason why she had wanted to leave in the middle of that session had been that at that moment there had come to her mind an association between the stream of milk on the ground *and the following incident, which had taken place between herself and her husband the night before.* The couple did not want any children; the husband had withdrawn prior to ejaculation, and she had seen the semen spurt to the floor.

This interpretation, supported by the criteria of evocation and of similarity, is indisputable. The associative method leads to the result which general symbolism enabled us to predict. We know that the cow's or goat's teat is a typical Freudian symbol of the penis.¹ The only objection which it could possibly incur is that the dreamer had already some idea of psycho-analysis. But this objection in no way impairs the certainty of the interpretation. All that can be deduced from it is that the dream itself may be slightly artificial.

Let us suppose that the dreamer had not herself associated the image of milk spilt on the ground with her memory of coitus interruptus, and that the analyst had learnt from her husband the circumstances in which she had dreamt the dream; the interpretation would have been just as certain, but would have been derived from the symbolic method alone.

Here is a dream in connection with which no associations were supplied according to the classical technique, but which was spontaneously related in the course of conversation by a girl who was quite ignorant of psycho-analysis. She had fallen in love with a young man, who had not appeared to take any notice of her. Some time later, her family suggested that she should marry another young man. Before consenting to see him, she begged a friend of her family to make overtures to the man she loved. He asked for some time to think it over, and finally sent back his refusal. The girl fell into a characteristic state of depression. Such was the situation when she was visited by another friend of the family, very well versed in psycho-analysis. He inquired after her health. She complained of various symptoms, especially of disturbed sleep and nightmares, and independently volunteered the information that the night after she had received the bad news, she had had the following dream: "I am on the bank of a river. I see in the grass a kind of conger or eel; the animal's head seemed to be cut off; it moved towards the water, disappearing into the grass like a snake."

In connection with this dream I made the following little experiment. I narrated it to a psycho-analyst with whom I am acquainted,

¹ D., pp. 63-5.

omitting all the circumstances, and I asked him to tell me, from the manifest content of the dream and from general symbolism (i) what was the sex of the dreamer, and (ii) what was the general meaning of the dream. He replied in these very words: "It's a woman castrating a man."

Let us set aside psycho-analytical jargon with its violent images. Let us not talk of castration, but only of sexual frustration. No one, I imagine, would dispute (i) that the male penis plays a vitally important part in marriage; (ii) that there is an objective resemblance between the conger, eel and snake on the one hand, and the penis on the other, since these four entities are all cylinders of living matter, perforated with a central canal; (iii) that consequently the beheading of the conger, eel or snake may constitute a representative image, brutal but very expressive, of sexual frustration. This being so, it is indisputable that the girl's dream was occasioned by the violent emotion she felt at the news that her marriage hopes were disappointed. If we reject the psycho-analytical interpretation, we are forced to deny that the dream was aroused by her disappointment, for it is impossible to maintain that the dream is a reaction to the bad news, but that its manifest content bears no relation to that news. The content might have been *different*; it could not have been *indeterminately different*. The exact circumstances in which the dream took place lead us to accept the interpretation suggested by general symbolism.

I hasten also to add that the interpretation of this dream is much less certain than that of its predecessor. There is so close a resemblance between semen spilt on the floor and goat's milk streaming on the ground that the hypothesis of a pure coincidence is inadmissible. Between the frustration of marriage hopes and the beheading of the conger, the similarity is much less rigid. We observe what difficulties beset the giving of really convincing interpretations simply by the symbolic method. It can only be achieved in quite exceptional instances. Even in such favourable instances as the dream we have discussed, we only reach a probability in the face of which I believe a sceptical attitude is still wholly legitimate.

III. Conclusions

The conclusions we feel we may draw from our discussion of the methods of psycho-analytical investigation concern first those methods themselves, and then the psychic realities they enable us to explore.

As far as the methods themselves are concerned, we shall not

seek to conceal our conviction: correctly applied they can lead us to certainty. We must not, however, cherish any illusions: certainty is very rarely attained; even a serious probability is not very frequent; more often than not no conclusion is possible. As Freud expressively puts it, one must be ready to work "tons and tons of ore containing very little of the valuable steel you are looking for."¹ We would willingly add that the first quality, indispensable to anyone who claims a really scientific approach to psycho-analysis, is to know how not to draw conclusions. That is obviously a very difficult attitude to maintain. The physician, with a therapeutic aim in view, cannot limit himself to a strictly critical standpoint. "A psycho-analysis," comments Freud with justice, "is not an impartial scientific investigation, but a therapeutic measure; its essence is not to prove anything, but merely to alter something."² Pure science, therefore, must be content with training analyses, and with psychological research tests. Can one say that training analyses, which aim at instructing future psycho-analysts, are conducted in conformity with the laws of impartial research? In the work of psychological research tests, which we are forced to fall back upon, one must act as if one had all eternity before one. If one yields in the slightest degree to eagerness to draw conclusions, one is lost. Here are some figures which will give an idea of the proportion of useless material. I investigated a case of chronic hallucinatory psychosis for twenty-four sessions without formulating a single interpretation which satisfied me. In a case in which a serious psychic conflict was not revealed by any appreciable neurotic symptoms, I had to wait for seventy sessions before acquiring details of the imaginatory fantasies accompanying masturbation.

Personal research is clearly the best—perhaps the indispensable—means of attaining conviction. Indeed, it seems to me very difficult to reach certainty through the reading of psycho-analytical works. Speaking for myself, if I had not been brought face to face with the facts, I should probably have remained sceptical. It will be objected that personal experience can be quoted against psycho-analysis as well as in its favour, for certain well-known followers of Freud have deserted his school. This objection vanishes before a careful examination of the intellectual history of these psycho-analytical rebels. Not one of them was capable of making a sharp distinction between the method and the doctrine. Summary adherence to a system which exhibits serious defects necessarily leads, when these defects are discovered, to an equally summary rejection. These two successive attitudes are equally uncritical.

¹ P. L. A., p. 114.

² H., p. 245.

Personal investigation meets with a certain number of obstacles which it would be as well to point out. Some are more especially methodological, others doctrinal.

Among the methodological obstacles, I shall first instance the deplorable impression produced by the extravagances of psycho-analysts upon unprejudiced inquirers who have a respect for scientific discipline. It may be said without the least exaggeration that the psycho-analysts are the worst enemies of psycho-analysis. As Kretschmer very justly observes:

What has largely obscured the great merits of the psycho-analytical school, and incurred for it, despite the most valuable results of psycho-analytical research, almost wholesale disapproval, has been the arbitrary dogmatism, and, in the matter of proof, almost unbelievable carelessness exhibited in the interpretation of results.¹

Claparède has stated the same thing in humorous terms:

Psycho-analysts give me the impression of being the owls of psychology. They see in the dark. That is certainly a great advantage, for no doubt there is a great deal going on in the vaults of our subconscious, as well as in the darkness of the primitive mind, and they have discovered a number of relations and facts which the other psychologists had missed. But there is another side to this advantage: used to the night, they sometimes seem unable to bear the light, or to state their conceptions clearly and in a rational form which may convince those whose convictions, unlike their own, are not ready-made. They have also lost the sense of fine distinctions, and do not seem able to discriminate very clearly between a mumbo-jumbo hypothesis and a true induction.²

When confronted with the excesses of the Freudians, it is good to recall the old maxim, *abusus non tollit usum*. In good methodology, negative cases prove nothing. The colossal number of false interpretations does not strictly imply any conclusion against the possibility of arriving at correct and demonstrative interpretations. The existence of a single one of the latter is enough to establish the legitimacy of the psycho-analytical method.

Fairly closely akin to the foregoing is the difficulty arising from the relatively limited number of instances in which interpretation is possible. Certain people would be led to conclude that the causal connections asserted by interpretation are in reality mere coincidences. A double reply may be made to this objection. Firstly, it is metaphysically impossible that a psychological event should be

¹ Kretschmer, T. M. P., p. 256.

² *Archives de psychologie*, vol. xxi, pp. 358-9. Account, signed C., of Otto Rank's work, *Birth-trauma*.

totally caused by a non-psychological reality; for that would be a breach of the principle of sufficient reason. We therefore know that a solution exists before we are able to specify what that solution is. Secondly, the objection disregards the radical difference, stated above, between the case in which the causality has an intelligible value, and that in which it can only be established by the statistical method. There are certain types of crime whose author can rarely be discovered. No one quotes the fact that they are in a minority as an argument against the instances in which proof may be adduced.

This leads us to insist upon a fundamental quality of psycho-analytical investigation which is a stumbling-block to many people. Analysis explains the individual present by the individual past. If we adhere to the narrow meaning of the word "science," which limits this term to the explanation of the particular by the general, of the event by the law, in contradistinction to history, which is the explanation of the event by an antecedent event, we shall say that psycho-analysis is a discipline, not of the scientific, but of the historical type. If we adopt this terminological convention, we must recognize that many sciences contain an important and irreducible historical element. Let us consider in geology, for example, the problem of the structure of the Alps. Since the *Alpine massif* is, in the philosophical meaning of the word, an individual, the explanation of what is unique in its formation will be a question for history, not for science, to determine. If, on the contrary, we accept a wider definition, regarding as scientific every correct demonstration of a causal relation, even between strictly individual elements, there is no reason why we should refuse to call psycho-analysis a science. Moreover, whereas psycho-analysis begins by relating the individual to the antecedent individual, it is not precluded from subsequently rising to the level of generalization; we need merely recall the theories of the failed act, of the dream, or of the neurotic symptom, and the speculations on instinct or on the structure of the psychic apparatus.

A final methodological difficulty is derived from the confusion made by many critics of psycho-analysis between the illogicality of the product investigated and that of the method of investigation.¹ It must be recognized once and for all that psychology is not logic, and that dereistic psychic products must be treated as objects between which one must attempt to establish causal relations. We often find writers inveighing against the Freudian concept of over-interpretation, or that closely akin to it of over-determination. They regard them merely as sophistical hanky-panky. In fact, to

¹ Jones, P. P., p. 5.

say that a dream-image has a double meaning, or is over-determined, is to assert that its emergence into the field of consciousness is due to two forces, not to one alone. What is there contrary to science in this? Such critics are misled by the fact that, accustomed to normal thought, in which logical governance by the object predominates, they are incapable of adjusting their angle of vision to dereistic thought, in which the cognitive function is no longer at work, so that logic and truth cannot possibly be involved, but only causality. We may grant that there are mitigating circumstances in the confusion we are attacking, in that the certainty of the interpretation very often diminishes in direct proportion with the logical quality of the product investigated. In suggesting the criteria of evocation and of similarity, we pointed out that the extrinsic associations were often impossible to verify, but that their importance in psychic causality had been established beyond question by Pavlov's experiments in conditioned reflexes. When we proceed by synthesis, going from cause to effect, as Betlheim and Hartmann do in their experiments in sexual symbols, we do not come up against this difficulty. But when we proceed analytically, from effect to cause, as in the case of ordinary dream-interpretation, the task is by contrast unrewarding. Let us for a moment imagine Pavlov precluded from the synthetic, experimental creation of conditioned reflexes in his dogs, and reduced to using the process of analysis and observation of conditioned reflexes formed in unknown circumstances; reflexology would still be undiscovered.

The doctrinal obstacles are no less important than the methodological. Psycho-analysis is not a philosophy, but certain philosophies absolutely preclude psycho-analysis. It is clear that if one professes strict epiphenomenalism, if one lays down as an *a priori* principle that psychic realities, having no inherent efficacy, are exclusively caused by the state of the brain, there can be no question of psycho-analysis. We could not bring ourselves to discuss such a system. Two observations will suffice: Firstly, the existence of error, which cannot be denied without contradiction, compels us to recognize that material reality and knowledge are radically distinct. Secondly, if this is so, and if knowledge is a perfection superior to simple material reality, one cannot, without violating the principle of sufficient reason maintain that matter is a *total* cause, either of knowledge or of its debased dereistic forms.

The identification of the psychic with the conscious is likewise an insurmountable obstacle to the understanding of psycho-analysis. Since we have discussed this question at length in Chapter I of this volume, we shall not return to it.

Some people are averse to psycho-analysis on moral grounds. They regard the psycho-analytical conception of sexuality as inadmissible, and believe further that the Freudian theory of the superego ends in depriving morality of all objective value. Since these topics must be thoroughly investigated in subsequent chapters, we shall for the moment simply put forward some summary observations. Firstly, it must never be forgotten that Freud himself has on several occasions asserted, as we said in Volume I, that dreams might very well have non-sexual causes. The following passage may profitably be quoted once again :

The assertion that *all dreams call for a sexual interpretation*, against which there is such an untiring polemic in the literature of the subject, is quite foreign to my *Interpretation of Dreams*. It will not be found in any of the eight editions of this book, and is in palpable contradiction to the rest of its contents.¹

Secondly, our personal view is that it is important, in the present controversy, to distinguish three things: psycho-analytical methodology, the scientific sexology of psycho-analysis, and the Freudian philosophy of sexuality. Psycho-analytical methodology, at least as we have stated it in the foregoing pages, does not in itself imply any doctrinal premise, sexualist or anti-sexualist. After careful abstraction of any such premise, it enables us to approach the investigation of the scientific sexology of psycho-analysis with completely unbiassed minds. Let it not be objected that Freud himself would probably not subscribe to our methodological postulates; in this volume we are no longer historians, but independent seekers after psycho-analytical truth. For this purpose, we must not begin by imagining that we know what in fact we do not know. Does infantile sexuality exist, or does it not? *A priori*, we cannot tell. Is sexuality, or is it not, the specific cause of the neuroses of psychic structure? *A priori*, we cannot answer this question. The observation of facts and their interpretation according to the rules laid down above will provide us with our solutions, and in cases where our means of proof seem to us insufficient, we shall beware of drawing conclusions. Whereas scientific sexology is limited to the investigation of the causal relations of the sexual function which may be established by observation and experimentation—without any claim, moreover, to provide exhaustive explanations—the philosophy of sexuality is compelled to take up a position on the place of the sexual function in man. That is to say, it is necessarily led to pronounce upon the

¹ I. D., p. 373; underlined in the text. Cf. Claparède's essay on "Libido," introduction to French edition of Freud's *Five Lectures on Psycho-analysis*; I. L., p. 211.

function of man in the universe, and upon the fundamental origin of things. We shall try to define as exactly as possible the boundaries between scientific sexology and the philosophy of sexuality, and we shall describe our conception of the latter in sober terms.

The distinction between the psycho-analytical method, scientific sexology, and the philosophy of sexuality, enables us to solve a doctrinal difficulty closely akin to that which we have just discussed. Many people regard psycho-analysis as in the line of evolution of empiricism, and Freud as a lineal descendant of such philosophers as Hume, Stuart Mill, and Spencer. There is no doubt that Freud leans strongly towards a metaphysic of pure experience, but from the strictly scientific standpoint, the fact is of no interest. A savant is not to be judged by his *Weltanschauung*, as is the regrettable habit of far too many philosophers. Application of this method would lead us to form a picture of Newton by paying principal attention to his (practically insane) commentary on the Apocalypse.

When one undertakes psycho-analytical investigation, avoiding the obstacles we have just pointed out and remaining strictly attentive to proof, one becomes progressively more aware that many of Freud's or of his followers' interpretations, which at first sight seemed ridiculous and forced, are fundamentally correct, but carelessly presented and unsuitable for quotation to beginners. Some critics will hasten to object that what we have just described is simply the origins of professional distortion. Professional distortion certainly exists, and it is legitimate to beware of it. For our part, we have carried this caution so far that we should have liked to insist that the interpretation of a dream should be based solely on the material of the specific instance, without taking any account of similar instances previously encountered. Subsequently we realized that such a postulate was unworkable. The human mind cannot prevent itself from profiting by experience, and ought not to do so, even though it could. The medical student starting hospital work is often astonished to find his chief pronouncing a diagnosis on signs which seem insufficient to his inexperienced eye, and yet the later history of the case proceeds to justify the expert's confidence. The same is true of psycho-analysis. Many neuro-psychiatrists, who are often very distinguished in their own line, but have no personal experience of psycho-analysis, deliver very severe judgments upon it. They must be reminded that, even in psycho-analysis, the right to an opinion must be acquired. Division of labour, which is the indispensable condition of scientific progress, inevitably entails specialization of talents. One learns to interpret dreams by actually interpreting them, and not by studying the pathological histology of the brain.

Yet those who are alarmed by the bogey of professional distortion in psycho-analysis deserve some reassurance. First, it is possible to quote simple examples which even the non-expert will find convincing. Throughout both volumes we have tried only to give examples of this type, and we hope that even the most sceptical will grant us at least some of them. Further, the conclusions which one believes oneself able to formulate are justified, as in every science of observation, by the possibility of foreseeing them. I was investigating a case of dreaming of one's double, involving the correct solution of a geometrical problem during sleep. In the course of free association at the third session, the analysand said:

I see a rock with a wreck, an old derelict boat. I have just lost track—a voluntary idea crossed my mind, telling me that it was useless. [Go back to the boat.] Wreck—when I saw it, I thought of the wonderful description of the storm in David Copperfield. He was sleeping on his shoulder as he did at school.

Given that the preceding session had led me to the conclusion that this dream of the patient's double was based upon identification with a friend who had since committed suicide, I formed the hypothesis that the words inexactly quoted: "He was sleeping on his shoulder as he did at school," were an index enabling me to foresee that it would not be long before the theme of homosexuality would be reached. I made no mention of this hypothesis to the analysand, and I wish to emphasize the fact that in discussing the identification with him at the first session I had in no way suggested that it was of a homosexual nature. At the fourth session, the analysand himself spontaneously opened the topic of homosexuality. My speculation was therefore correct. Finally, let us recall that the general rules of scientific methodology, which we have tried to adapt in detail to the case of psycho-analysis, are a sure guarantee against error. The critic who suspects the presence of professional distortion everywhere, must demonstrate precisely what mistake in method has been made in the investigation whose results he rejects. If he cannot do so, we fear his hypercriticism may merely be a disguised form of fear of the truth.

Now we can pass on to conclusions concerning the psychic realities investigated by psycho-analytical methods.

The associative or the symbolic process enable us in many cases to arrive at a well-founded interpretation. What must be our view of the cases in which no solution is reached? In respect of the latter, we may propose two hypotheses: either we may say, by analogy with the successful cases, that a solution of the classic type exists,

but that some unspecified difficulties have prevented its attainment, or we may say that, although these dreams which are impossible to interpret have a psychic substructure, their derivation therefrom is so unthematic that they are, so to speak, meaningless. Let us not forget that the principle of sufficient reason compels us only to recognize that every psychic reality has a psychic cause, but that it leaves the manner in which that causality is exercised completely undetermined. I see no means of solving the problem I have just stated. We must, at least for the moment, be content to leave it open.

The same is true of the famous controversy concerning the part played by wishes in dreams. Freud's theory is open to two difficulties, which he has himself most frankly pointed out.¹ The dreams of patients suffering from traumatic neuroses reproduce the painful event which has caused the disorder unchanged.² Ordinary transference-dreams very often bring to light exceedingly painful past situations. The latter instance may be dismissed without too much trouble by observing that these painful situations are more or less worked out in the direction of wish-fulfilments, but the difficulty raised by dreams in traumatic neurosis remains solid and irrefutable. It has led Freud to reopen the question of the primacy of the pleasure-principle, and to work out the theory of repetitive automatism. Note that, even in Freud's view, the theory of dreams as wish-fulfilments has its limitations. I should personally carry scepticism on this point rather far, or, more accurately, I should once more substitute the methodological for the dogmatic point of view. When investigating a dream, the criteria of interpretation must be applied with the utmost rigour; very often one will eventually discover that a wish-fulfilment is involved, but one will not hold out over refractory cases, which one is always at liberty to ascribe to repetitive automatism.

The problem of wish-fulfilment in dreams is closely allied to that of the respective roles of the preconscious and of the unconscious proper in the ætiology of dreams. We know that Freud has maintained that although the unconscious tendencies which excite dreams may be of indeterminate type, they are nevertheless always reinforced by a tendency derived from the true unconscious, which tendency is a wish. Since the true unconscious is infantile in origin, this theory comes to the same as the statement: "The wish manifested in the dream must be an infantile wish."³ Freud himself is the first to recognize that this conception cannot in every case be demonstrated. But then again arises the vexed question of the right to

¹ B. P. P., pp. 9, 21-2. ² Jones, P. P., p. 235 (note). ³ I. D., p. 510.

generalize. Must we postulate an action of the true unconscious when we cannot contrive to demonstrate it? Is it not wiser to admit that the preconscious is itself capable of causing a dream? Here again we believe that the dogmatic controversy is fruitless, and we must deliberately hold to the methodological attitude.

We had intended simply to express reserve concerning dreams which are impossible to interpret, for if that is admitted, those concerning the roles of wishes and of the true unconscious must be admitted *a fortiori*. But since certain people may incline to believe that dreams always obey a most exact thematism, even when the latter cannot be discerned, it seemed worth while to state separately our reserves concerning wishes and the true unconscious, to which even the supporters of strict thematism in all dreams may subscribe.

Our final conclusion will bear on the problem of the censor and of disguise—concepts which are frequently taxed with anthropomorphism by the critics of psycho-analysis. We have quoted passages from Freud and his followers in answer to this accusation. It will be remembered that in Freud's view, condensation, dramatization and symbolization are in themselves independent of the censor. Secondary elaboration is derived from the need for coherence in awakening thought, and is moreover of insufficient interest to detain us. Only displacement seems to be invariably an effect of the censor, but it must be displacement in the strict sense, in which the affect is not only extended to a secondary representation, but detached from the primary representation, to which it normally belonged. It is perfectly logical to invoke a counter-force in order to explain this detachment. With this premise, we believe that the Freudian formulæ which represent the disguise as effected *in order to escape* the censor require more accurate adjustment. They suggest that the disguise is effected almost intentionally *before* the clash with the censor. This interpretation is far too anthropomorphic to command acceptance. Let us try to explain, by means of a simile, how disguise can bear a far more plausible aspect. When a volume of water meets a dam, the water penetrates the smallest crannies. No one imagines that the water adopted the shape of the crannies *before* reaching the dam. In the same way we may say that the disguise is effected *by* the censor rather than *in order to avoid* the censor. The psychic stream comes up against inhibitory forces and flows away down the channels of least resistance. This is moreover in perfect agreement with Freud's fundamental dynamism. If we wanted to make a thorough philosophical examination of the question, we should say that we have here a case of reciprocal priority of causes. In a spreading fire, the flames burn as they advance, and

advance as they burn. So when the wind blows open a window, it enters the room as it opens it, and opens it as it enters the room. We are therefore led to think that the dream-wish emerges into the field of consciousness as it disguises itself, and disguises itself as it emerges.

CHAPTER IV

EXAMINATION OF FREUDIAN SEXOLOGY

In the previous chapter we have stressed the paramount importance of the distinction between psycho-analytical methodology, the scientific sexology of psycho-analysis, and the Freudian philosophy of sexuality. Our first chapter on the unconscious, and our second on psycho-dynamism have thrown light upon the necessary postulates for a proper understanding of psycho-analytical methodology, of which our third chapter has constituted a detailed study. We must now approach a very different topic—the scientific sexology of psycho-analysis—which in the present chapter we shall examine in itself, and in the following chapter, in its application to the neuroses and the psychoses. Psycho-analysis and sexology cover fields which are respectively more extensive, the one than the other, according to the point of view one adopts. Psycho-analysis extends further than sexology, for it investigates phenomena such as failed acts and dreams, in which, as Freud himself explicitly points out, sexuality may play no part. But sexology, in turn, is more extensive than psycho-analysis, for the latter is only concerned with the psychological element in sexual events, whereas sexology further investigates their anatomical-physiological aspect.¹ We observe that psycho-analytical sexology is only a part of sexology. In the following pages, we shall not investigate the biological aspects of sexuality for their own sake, but simply in so far as the understanding of psycho-analytical theories requires us to do so. We shall divide this chapter into five sections: (i) Sexuality and Reproduction, (ii) The Evolution of Sexuality, (iii) Psycho-sexual Anomalies, (iv) Freud's Sexological Speculations, and (v) Conclusions.

I. Sexuality and Reproduction

Current opinion makes hardly any distinction between sexuality and reproduction, but scientific sexology, even of the non-Freudian variety, distinguishes them most sharply.

Reproduction [writes Havelock Ellis] is so primitive and funda-

¹ Hesnard, T. S., pp. 35-6.

mental a function of vital organisms that the mechanism by which it is assured is highly complex and not yet clearly understood. It is not necessarily connected with sex, nor is sex necessarily connected with reproduction.¹

We have therefore to examine the two following statements: (i) reproduction is independent of sexuality, and (ii) sexuality is independent of reproduction. But for this purpose we shall need provisional definitions which may be revised if a better knowledge and a more exact interpretation of the facts should require it. Reproduction, in our view, essentially calls up the idea of multiplication of life. We shall describe every process whereby the number of living beings of the same type may be increased as a reproductive process. Sexuality, on the contrary, calls up the idea of conjugation—a conjugation which generally takes place between two morphologically complementary elements. It may be realized on different scales: at the microscopic scale, we have fertilization of the ovum by the spermatozoon; at the macroscopic, copulation between male and female. Fertilization may take place without copulation, as in the case of many marine animals. Copulation may not be followed by fertilization. When no obstacle intervenes, copulation and fertilization end in reproduction.

Once these provisional definitions are accepted, the answer to our first question is not doubtful. Biologists unanimously admit the existence of asexual reproduction, which takes place by division, budding, or sporulation.² In the case of certain living beings, such as bacteria, we only find asexual reproduction. There is therefore no doubt that the answer to the first question must be in the affirmative: reproduction is independent of sexuality. The example generally adduced in support of this statement is that of the protozoa, but since it has been questioned whether asexual reproduction could be indefinitely prolonged without the intervention of conjugation in the case of this lower order of beings, we have preferred to rely on the example of the bacteria, which has never given rise to any dispute. As far as the necessity for conjugation in the case of the infusoria is concerned, modern biologists seem unanimous in rejecting it.

It has been observed [writes the author of a recent zoological treatise on the invertebrates] that in favourable circumstances, paramœcium and other species of infusoria can, under laboratory conditions, reproduce themselves for thousands of generations without the intervention of conjugation, suffering merely from periodic

¹ Havelock Ellis, P. S., p. 7.

² Brachet, *L'œuf et les facteurs de l'ontogenèse*, pp. 9–29.

phases of fatigue or *depression*, during which their rate of division is lowered. But they emerge spontaneously from these periods of depression by the elimination of a part of their nuclear substance, which they can achieve without conjugation.¹

Since there are beings in which sexual reproduction does not exist, and others in which it merely plays a complementary role, there can be no doubt that reproduction is not necessarily bound up with sexuality.

The answer to the second question is more difficult, and requires us to re-examine our definition of sexuality. We have admitted that it seemed possible to define sexuality as a conjugation of morphologically complementary elements, ending, unless prevented, in reproduction. But it may legitimately be claimed that sexuality exists even in cases in which no copulation takes place between the individual bearers of gametes, and in which the meeting of the gametes is "left to the hazard of attendant circumstances—dissemination by air, water, parasites, etc."² No one has ever denied the sexuality of plants, or of the very numerous marine animals which reproduce their kind in this manner. Serious difficulties begin with the interpretation of the conjugation of protozoa. With a view to seeing our way clear, we shall advance by stages. A first instance is that in which morphologically complementary gametes are fused together; this is called anisogamy. There are clearly no grounds for denying the sexuality of this process. In a second instance, which we find, for example, among the gregarines, there is morphological similarity of the two gametes, or isogamy. Must we still recognize sexuality here? It seems to us to be a question of terminological convention. It is important, however, to notice the continuity of this process with the former. If we regard isogamous conjugation as a sexual phenomenon, we cease to accept dimorphism as an essential characteristic of sexuality, but we still regard the latter as orientated towards reproduction. The third instance confronts us with a crucial problem. Certain protozoa exhibit conjugations

which seem to be governed by a biological finality of individual renewal, of "rejuvenation" (Bütschle and Hertwig), rather than by a finality of reproduction of an individual by other similar individuals. This conjugation, which is barren of any immediate result, consists in the fact that two protozoa—usually two ciliates—observed during their evolution in a nutritive fluid, come together at a certain moment, cling closely together in parallel contact throughout their length, and then, after some hours of this joint movement, come apart,

¹ Yung, *Traité de zoologie des animaux invertébrés*, p. 34.

² Hesnard, T. S., p. 261.

each thereafter pursuing its separate way. Close observation of what takes place during this intimate contact, among the paramœcia for example, clearly shows the existence of certain nuclear phenomena very similar to those characteristic of . . . the fertilization of more complex beings, e.g. a division of the micronucleus followed by the respective passage of one of the nuclei thus liberated into the other being, and by a fusion of this nucleus with the corresponding nucleus in the partner (*nuclear amphimixis*, a process involving a fusion followed by reorganization of the nuclear system of the individuals in conjugation). The biologist Maupas, who has closely investigated this curious process, has observed that it took place principally in old cultures of infusoria, in which asexual reproduction had occurred for some considerable time, and that these cultures on the way to exhaustion thereupon gained renewed vigour, becoming capable of intense multiplication, and as it were rejuvenated (caryogamous rejuvenation).¹

We have quoted this passage from Dr. Hesnard in full, for it shows the argument which certain Freudians derive from the phenomena of conjugation in infusoria to support their theory of the independence of sexuality in relation to reproduction. What is this interpretation worth? Before passing judgment upon it, let us attempt to formulate it clearly. It consists essentially in the claim that sexuality, in the ordinary sense of the word—i.e. the conjugation of morphologically complementary elements, ending, unless prevented, in reproduction—is not a simple, irreducible phenomenon. It must be regarded as the result of the evolutionary fusion of rejuvenatory conjugation and reproduction. We might say that conjugation in protozoa aims at the potential immortality of the individual, whereas fertilization in metazoa ensures no more than the potential immortality of the species. This vast philosophical-biological construction is based on the significance attributed to the conjugation of infusoria. Let us proceed to investigate this phenomenon. Some people, who regard dimorphism as essential to sexuality, might be tempted to maintain that conjugation is not a sexual process. To this we may give a dual reply: Firstly, we have seen above that the continuity between isogamy and anisogamy led us logically not to attach essential importance to dimorphism. Secondly, we must not lose sight of the fact that each micronucleus is divided into two parts, one of which remains immobile, whereas the other migrates.² We are therefore led to compare the mobile part to a male element, the immobile to a female, and the whole process to crossed fertilization as it exists in certain hermaphrodite animals. The requirement of

¹ Hesnard, T. S., pp. 53-5.

² This formula is very schematic; actually the facts are more complex. (D.)

dimorphism would thus be satisfied. Having resolved this difficulty, let us tackle the essential point. Once we are prepared to discuss as doubtful the dependence of sexuality upon reproduction, we cannot, without falling into a *petitio principii*, start with a definition of sexuality which asserts its essentially reproductive purpose. We shall therefore say that *by definition* sexuality is the conjugation of two elements, generally morphologically complementary, and we shall inquire whether *in fact* there exist conjugations which are not directed to the ends of reproduction, i.e. which, even in the absence of all obstacles, do not end in reproduction. Dr. Hesnard, in the passage quoted above, states this definitely. In his view, the conjugation is "barren of any immediate result," and it does not condition future multiplication except in the most general way, as does nutrition, for example, which no one would dream of classifying as reproductive. The least we can say is that Dr. Hesnard's interpretation is far from self-evident. It incurs the objection that since the beings concerned are protozoa, their single cell must be regarded both as an egg and as an individual, and consequently individual rejuvenation could only be separated from reproduction by an arbitrary distinction.

We observe that the theory of the *reciprocal* independence of sexuality and reproduction rests on a dual foundation—(i) the possibility of asexual reproduction alone to ensure the perpetuation of certain forms of life, (ii) the limitation of the effect (in the strict sense) of the conjugation of infusoria to individual rejuvenation. It is important to note that the first statement does not necessarily entail the second; reproduction may be independent of sexuality without the converse being true. With this proviso, we may now draw our conclusion. The theory of the *reciprocal* independence of sexuality and reproduction has no experimental foundation, and is simply a point of view. Asexual reproduction is an obvious fact, but a sexuality which, even in the absence of all obstacles, would not end in reproduction, is, on the contrary, an artifice of interpretation. We may readily understand how an idea of this kind should occur to a psychiatrist dealing with sexopaths whose sexual activity is hindered from ending in reproduction by the very fact of their anomaly, but from the point of view of general biology, it is without foundation.

Even if we admitted that in the case of protozoa conjugation is not essentially directed towards reproduction, it would nonetheless be indisputable that in the higher animals sexuality has reproduction as its effect (in the strict sense). Thus the "sexual," in our view, is not indeed identical with the "genital" but stands to it in a relation which various objects may hinder from becoming overt—although,

as an inherent aptitude, its elimination must destroy the concept of sexuality. This leads us to define the logical rules for the use of the word "sexual." Let us consider a similar case—that of the word "healthy." In the exact sense of the word, health only exists in animals. Strictly speaking, only animals are healthy. But we do not hesitate to speak of "healthy" food, or "healthy" urine, although the proper constituent of health is to be found neither in food nor in urine. Food is, in fact, one of the causes of health, and urine is one of its effects or signs. The word "healthy" is therefore capable of bearing both a narrow and a wide acceptance. The same is true of the word "sexual": in its first meaning it is applied to the genital; in its second, to that which is a cause, effect, or sign of the genital. The distinction between the primary and secondary sexual characteristics is a commonplace of biology. It is sufficient so long as we go no further than the anatomical-physiological level. But in psychology the situation becomes more complicated. The relation of certain psychic states to the genital region is no longer permanent and essential, but transitory and accidental. Conditioned reflexes are one of the most striking instances of these transitory associations between a psychic event, in itself sexually neutral, and a genital reaction. Higier quotes

the case of a man who had several times performed the sexual act in a room lit by a green lamp, who later experienced an erection whenever he saw a similar light. This acquired reflex had received no subsequent reinforcement, and gradually disappeared.¹

We must therefore recognize that the word "sexual" may bear three meanings according as it signifies (i) the genital, (ii) that which exhibits an essential causal relation to the genital, and (iii) that which exhibits an accidental causal relation to the genital. In the last group we find not only conditioned reflexes, but more complicated and more highly psychic phenomena. It is quite clear that in this third instance the use of the word "sexual" reaches the extreme limits of legitimate use.

Before concluding these general observations on the relations between sexuality and reproduction, we have still to define the concept of the sexual instinct. Instincts of all kinds may be characterized from either an objective or a subjective point of view. Objectively, it may be stated that certain stimuli emanating from the external world are capable of releasing in animals (with no need for any previous experience) reactions permitting the fulfilment of a biological function. An essential point to note is the existence of an

¹ Higier, F. S. M., p. 35.

innate mechanism which transcends true sensory perception. The butterfly which has just left its cocoon at once inserts its proboscis into the calyces of flowers. In animal psychology, we are obliged to keep to the objective point of view, but in human psychology it would be absurd to pay no attention to the subjective. Subjectively, instincts are characterized by specific pleasure—a point upon which Freud has certainly been right to insist. Passing from instincts in general to the sexual instinct, we shall be brought to examine several attempts which have been made to divide it into its various components. The most famous is that of Moll, who distinguishes the impulses of detumescence and contractation. The impulse of detumescence only leads to genital discharge. Clearly, if human beings exhibited this sexual component alone, fertilization would be impossible, and our race would become extinct. We have already pointed out that in many marine animals there takes place merely a simple excretion of the sexual products, physiologically comparable to other excretions. This is an individual act, set in motion by an automatism of rejection, of expulsion, without the participation of any finality of any external object or aim.¹

We believe it is worth labouring this point, for to our great astonishment, we have been able to ascertain that some physicians regard the human sexual act in these purely excretory terms, ignoring the most typically instinctive element in human sexuality—the impulse to contractation. It is due to this that genital excretion is directed towards an object and an end, that man is drawn to woman in a penetrating embrace. The instinctive quality of the impulse to contractation is clear in the first psychogenic erection. Moll has some excellent words to say on this subject:

Some boys experience [he writes] long before puberty, the need to touch women, to embrace them, and to think about them, although no thought of any genital participation is implied herein. It often happens that a boy with such preoccupations is himself surprised when he finds his representations translated into genital phenomena, whether simply erection takes place, or whether, in embracing a girl of whom he is fond, he experiences erection and ejaculation.²

Moll's theory has been criticized by various writers, especially by Havelock Ellis, who believes that detumescence cannot be regarded as a starting-point, but must be preceded by tumescence. "‘Contractation,’ whether physical or psychic, simply has as its end the heightening of tumescence, and may be regarded as part of

¹ Hesnard, T. S., p. 261.

² Krafft Ebing and Moll, P. S., p. 49.

the process."¹ We regard this point of view as unacceptable. It is certainly clear that tumescence precedes detumescence—a fact which Moll has never dreamt of denying. He would readily accept the following statement of Havelock Ellis: "In tumescence the organism is slowly wound up and force accumulated; in the act of detumescence the accumulated force is let go, and by its liberation the sperm-bearing instrument is driven home."² The contrast between tumescence and detumescence is purely physiological, and takes no account of the strictly instinctive element in the sexual impulse. To realize this, we need only compare the urinary and sexual impulses in man. In the urinary impulse we may distinguish two phases—that of tension, and that of relief—which are consequently analogous to sexual tumescence and detumescence. But the urinary impulse only impels man to empty his bladder; we have here a simple excretion, with no orientation towards an external aim or object. In the sexual instinct, on the contrary, the important fact (as is proved by the first psychogenic erection) is this innate orientation. To maintain, as Havelock Ellis maintains, that the aim of contractation is simply to intensify tumescence, is to fall back again, after a long and circuitous scientific journey, into the old anti-psychological mistake of regarding human sexuality merely as a simple automatism of expulsion, which is not even true of the sexuality of frogs. Higier has reopened the question, and attempts to carry the analysis of the sexual instinct further than it was carried by Moll. He successively investigates the tendencies (i) to detumescence, (ii) to deturgescence, (iii) to contractation, (iv) to embracing, (v) to penetration, and (vi) to friction.³ His minute analysis is really valuable, but is an unnecessary complication for our purposes, which may be satisfied by a distinction of two components, the one of simple local excretion, and the other, more highly psychic, of the innate orientation of that excretion towards an object and an aim. Higier has already clearly grasped what we regard as the essential point: "The tendency to contractation," he writes, "appears as the most important element of the sexual impulse in man. Without this, it would be impossible to explain the appearance of psycho-physical sexual phenomena."⁴ Later, in an interesting general summary of the emotional constituents of the sexual impulse, the same writer concludes that the importance of the tendency to contractation in the sexual life of human beings is "of absolutely primary importance."⁵

¹ Havelock Ellis, P. S., p. 15.

³ Higier, F. S. M., pp. 213–33.

⁵ Higier, F. S. M., p. 237.

² Havelock Ellis, P. S., p. 16.

⁴ Higier, F. S. M., p. 226.

II. The Evolution of Sexuality

In the development of sexuality we may distinguish the dual aspect of integration and of differentiation.

The idea of integration is of the type of accretion and quantity. The existence of processes of this kind is clearly demonstrated in embryology, an outstanding example being the mode of formation of the head in vertebrates. The genetic study of the instincts leads to the transposition of the notion of development through integration into the psychological field. Moll very rightly points out that the impulses to detumescence and contraction first appear separately, and that it is by their fusion that the adult sexual instinct is achieved.¹ Von Monakow and Mourgue state a similar case in connection with the nervous system in general. "Function," they write, "is the result of a progressive integration starting with elements, or *bricks*, which, *at first*, each possess a *relatively independent* development."² The same writers apply this schema explicitly to the sexual instinct; before puberty "there is no *link* between the psychic sphere and the local function of the genital organs; integration has not as yet taken place."³ Their formulæ are, in a general way, identical with those of Moll. Later we shall see how far von Monakow and Mourgue are right in saying that the sexual components are *relatively independent* of each other.

The idea of differentiation is of the logical and qualitative type. It is more difficult to grasp than the idea of integration, so that, although of primary importance, it has been neglected by altogether too many sexologists. Dessoir deserves the credit for having shown that it is indispensable to an understanding of the development of the sexual instinct. According to this writer, it is in the stage of later childhood, which he calls

the stage of undifferentiated sexual inclination, that there appears an object, often also an aim, towards which love tends. But as yet there exists no differentiation such as that the object must purely and simply belong to the opposite sex. Often such inclinations are rather directed towards persons of the same sex, animals—in short, any living creature—and this period may continue as far as the twentieth year, but may often begin at the fourth or fifth. Similarly, during these years the aim is not as yet predetermined. The aim of the instinct, which will later be expressed in the instinct of copulation, may quite well, during this period, remain undifferentiated. Perverse

¹ Krafft Ebing and Moll, P. S., pp. 47–51.

² von Monakow and Mourgue, I. B. N., p. 165. *Italicized in the text.*

³ *Idem*, I. B. N., p. 79. *Italicized in the text.*

contacts, embraces, or acts are a very frequent aim during these years, whether their object belongs to the same or to the opposite sex. Later the instinct gradually becomes differentiated, and at the stage of sexual maturity in the normal man, it is usually differentiated in favour of the opposite sex.¹

This passage, in which Moll states and adopts Dessoir's ideas, requires some explanation. Let us take the case of a man eating an apple. From the motor aspect, his act is perfectly differentiated. But simple observation of his conduct while doing so is quite insufficient to inform us of the degree of differentiation of the psychic impulse which he is obeying. He may be enticed either by food in general, or by fruit in general, or by apples in general, or by a particular variety of apple in general, or by a single specific apple of that variety whose appearance is specially promising. If the man himself gives us no information, we shall have to observe his behaviour for a very long time and in a number of different circumstances before discovering what are his tastes, and at which of the five stages of differentiation of the nutritional instinct mentioned above he was when he was eating his apple. The case of the sexual instinct is exactly the same. Given the instance of a little boy who, while romping with his dog, experiences an erection accompanied by definite pleasurable feeling. Some sexologists would at once declare that he suffered from sadistic masochism and bestiality. It is seriously imprudent confidently to advance such a diagnosis. In order to assert that the boy was suffering from bestiality, one would have to be certain that he was sexually excited by the animal in so far as it differed from a human being, and not in so far as it resembled one. Similarly, in order properly to conclude that sadistic masochism was present, one would have to be sure that one was dealing with the impulse to cruelty in so far as it transcends the male aggressive-possessive quality. We may, therefore, have here not a case of sadistic-masochistic bestiality, but a normal case in which the masculine aggressive-possessive quality is still aroused in an undifferentiated manner by any living creature at random.

We therefore regard as particularly unfortunate the name of "polymorphous perverse" which Freud has applied to the child. Freud has defended himself against the criticisms directed against him on this score. "If I have described children as 'polymorphously perverse,'" he writes, "I was only using a terminology that was generally current; no moral judgment was implied by the phrase."² We regard this reply as absolutely insufficient. It is clear that no

¹ Krafft Ebing and Moll, P. S., p. 21.

² A. S., p. 69.

scientific criticism dreams of making the clumsy error of ascribing to Freud a judgment of moral value upon the child. But whether Freud intends it or not, the expression "polymorphous perverse" either has no exact significance, or else includes a judgment of biological value, and that judgment is false. Havelock Ellis—whom no one, I imagine, would accuse of being a bigoted moralist—writes on this subject:

The impression of "polymorphous perversity" is merely superficial; it is (as I have frequently had occasion to point out) the kind of "perversity" which an ignorant observer might find in the twisted fronds of young ferns. The conditions of life demand that twisted shape in the young growing things, and the real "perversity" would be if the young were to exhibit the shape of that which is fully grown.¹

If we come down to bed-rock, we shall be obliged to recognize that the expression "polymorphous perverse" conveys a triple confusion. Firstly, it leads to a confusion between non-integration, the normal phase at the start of the development of a function, and pathological disintegration. As von Monakow and Mourgue have very justly observed in their statement of the ideas of Hughlings Jackson:

Dissolution is, in the wide sense, the inverse of evolution, with the important restriction that the former process is never the *exact reproduction*, in a reverse order, of what has been acquired in the course of existence.²

The same writer's words on the disintegration of movements are equally applicable to disorders of the instincts: "In disintegration, we have not *merely* a simple resolution of the forms of movements, acquired with difficulty during childhood, into their original elements; we have rather a regression to the primary ontogenic elements, and at the same time a defective, *piecemeal reintegration*, rather like a whole work composed of different pieces (*anachronisms*)."³ The expression "polymorphous perverse" tends to level out the vital difference between infantile non-integration and disintegration, which is always complicated by the anachronistic and discordant reintegration characteristic of the pathological state. Secondly, the formula we are criticizing ignores the distinction between the non-differentiation and (we must apologize for the use of an incorrectly formed expression) the paradifferentiation of a tendency. Let the reader

¹ Havelock Ellis, P. S., p. 131.

² von Monakow and Mourgue. I. B. N., pp. 171-2. *Italicized in the text.*

³ *Idem.*, I. B. N., p.

again refer to the example quoted above of the boy who experiences sexual excitement while romping with his dog. It is clear that we have here normal non-differentiation, if that which excites the child sexually is the common characteristics with a human being exhibited by the dog, but paradiifferentiation, if the true stimulus is that wherein the dog differs from a human being. Let us suppose that the incident causes a serious emotional shock in the little boy, and that he later manifests true, indisputable bestiality; some people will conclude that this is a case of constitutional bestiality, and may perhaps quote in support of their theory the following passage from Freud:

When, therefore, any one has *become* an unequivocal and overt pervert, it would be more correct to say that he has *remained* one, for he exhibits a certain stage of inhibited development.¹

This time we are confronting the crucial problem, and Freud's formula seems to be untenable.² It is quite possible that at the moment of the dog-incident the child may have been already tainted with zoophily, but that merely relegates the problem—can one accept the existence of constitutional bestiality? To state the question plainly is to solve it. It is more than clear that we cannot accept the existence of an hereditary biological factor positively determining a human being to experience sexual attraction towards a dog precisely in so far as the dog does not resemble a human being. But then it cannot be said that perversion represents an arrested stage in development; it represents, on the contrary, an exogenous paradiifferentiation of a normal state of lack of differentiation.³ Thirdly, the theory of polymorphous perversity confuses the ideas of active and passive potentiality, or in more biological language, its supporters make a mistake comparable to that made by many physicians prior to Pasteur's age in speaking of "spontaneous morbidity" and so exaggerating the role of the field at the expense of the exogenous form—the microbe—of which they knew nothing. For the moment we cannot do more than indicate this point, which we shall later discuss fully. The proper first cause of any disorder is always extrinsic to the being affected by that disorder. This may be a surprising statement, but it is really a strict consequence of the principle of sufficient reason. Spontaneous morbidity is as good as "Epicurean clinamen"; both theories admit that a tendency may change its orientation without cause, which is incompatible with our

¹ D., p. 62. Italicized in the text.

² But Freud did not write it in connection with bestiality. (D.)

³ Later we shall see that this formula is only a first approximation. (D.)

rational requirement of causality. The doctrine of "polymorphous perversity" falls into the same error of logic. It is impossible to admit that the very essence of the living being contains a positive preordination to disorder considered strictly as disorder. An individual may, no doubt, possess an hereditary stigma, but this merely affects the immediacy of the problem, and the first origin of the stigma is always exogenous at one point or another of the ascending scale. No type of being can exhibit, towards a disorder to which it is liable, any but a negative pre-ordination, a passive potentiality, a receptive field. The child is not a "polymorphous pervers"; he is "polymorphously pervertible." Let no one object that this is a verbal distinction. What pathologist would be willing to dismiss as verbalism the distinction between the seed and the field?

The concept of "polymorphous perverse" having been replaced—or rather perhaps clearly formulated—by that of "polymorphously pervertible," we must pass on to a detailed examination of another concept upon which it is based—that of "erogenous zones."

The hedonicity of the oral and anal zones, which is not allied to the normal functions of nutrition or defæcation, is of sexual nature. That is the gist of the Freudian theory. A first argument in its favour, an argument which is not usually explicitly formulated, but which is implicit in the writings of Freud and his followers, runs as follows: a pleasurable sensation is inconceivable without a biological foundation; it must always be related to some function or other; wherever oral or anal hedonicity is not derived from the nutritional function, it can only be related to sexuality. We do not dream of disputing the principle that every organic pleasure is dependent upon a biological function, but we regard its application here as open to discussion. Pleasure has a certain mechanism, and that mechanism is capable of derangement. It follows that it is not enough for a pleasure to be independent of the *normal* exercise of the function in the organ in which it appears, for it to be legitimately related to another function. No one any longer disputes the existence of an oral hedonicity which is not related to normal nutrition,¹ but the most simple hypothesis is to regard it as an anomaly of the nutritive pleasure. A positive proof is necessary in order to relate oral hedonicity to the sexual function.

A second argument now arises. Is not the fact that in certain persons pleasure of the penis or clitoris is periodically replaced by anal or oral hedonicity, the proof that these hedonicities apparently relating to the alimentary tract are merely substitutes for sexual

¹ Cf. Wallon, *Les origines du caractère chez l'enfant*, p. 25.

pleasure, that their basic nature is sexual? This argument seems to us no more demonstrative than the former. The fact that two pleasures are interchangeable proves *both* that they have a common generic nucleus, and that they exhibit specific differences. We are told that anal pleasure is a substitute for that of the penis. Why may we not equally well say that pleasure of the penis is a substitute for that of the anus? The comparative abnormality we have just recognized in anal pleasure (we are not here concerned with the normal pleasure of defæcation) makes no difference at all. In fact, both anal pleasure and that of the penis are two differentiations of the general tendency to pleasure which, in itself, is no more nutritional than sexual. Mechanical energy may be replaced by calorific, both being differentiations of a single fundamental concept which is no more reducible to the one than to the other, i.e. that of "energy," without qualification.

The Freudian apologists now have a third argument to advance. Disease, they will say, is not creative; there is fundamental homogeneity between the normal and the abnormal, so that the latter can only be regarded as a result of functional release. The principle upon which this argument is based requires clear formulation. Certainly disease is not creative in the strict sense of the word, but it is none the less true that the action of the external world may determine the formation in the individual of harmful syntheses, of integrations contrary to the development of the vital scheme. This is quite clear in the instance of conditioned reflexes. Certain rare circumstances or exceptional coincidences may cause the establishment in the animal of conditioned reflexes which will lead him to biological disaster. In every perversion, a careful distinction must be made between the residue of normality and the truly abnormal aspect; the latter of which represents the accidental synthesis which has failed biologically. As we have already said, the Freudian theory tends to confuse disintegration with discordant reintegration, non-differentiation with paradifferentiation.

We have still to discuss a fourth argument. "If you do not admit the sexual quality of oral and anal hedonicity," the strict Freudians will say, "you will have to maintain that when sexuality makes its appearance, it comes from a source outside the phenomenal series, which leads to the substitution of a partly metaphysical conception of causality for scientific determinism." This consequence with which we are threatened is accepted without any difficulty in the physico-chemical sciences which neither biology nor psychology can hope to rival in point of exactness. Let us return to our example of energy: it is not a phenomenon, yet no physician could undertake

to do without this concept. When mechanical energy succeeds calorific, it is recognized without protest that the new differentiation does not arise, strictly speaking, from the old, but from the ultra-phenomenal substructure of energy. It would be strange indeed for biologists and psychologists to display more caution than physicists.

The foregoing discussion shows that the arguments hitherto quoted in favour of the Freudian theory of erogenous zones are not demonstrative, but they in no way prove that that theory is wrong. In fact, we have not as yet touched upon the fundamental question: what kind of relation is there between stimulation of the erogenous zones and that of the genital zone? Higier has carefully examined the three possible solutions to this problem in his study of "distant reflex erections."¹ A first instance is that in which peripheral stimulation acts, not directly and independently but through its psychically recognized importance.

This is a true psychogenic erection [writes Higier] for it is produced through paths from the cortex to the periphery. The somatic stimulus here produces its effect through its psychic value, and not through its specific physiological quality as a tactile stimulus derived from a definite bodily region. It is therefore understandable, for example, that a touch on the stomach may, as being more intimate, provoke erection, whereas a touch on the foot does not.²

It is clear that facts of this kind do not bring the least support to the theory of the sexual character of the hedonicity of the so-called erogenous zones in the child. A second instance is that in which peripheral stimulation has, by its repeated coincidence with an absolute stimulus, acquired a conditioned reflexogenous power.³ Here again there can be no question of erogenous zones in the Freudian sense. Having eliminated the facts reducible to psychogenic erection or to conditioned reflex, Higier reaches the third instance, which he states as follows:

There exists nevertheless a *true regional erotogenic selectivity, not acquired in individual existence, affecting certain parts of the body*. Its existence is certain, although it is not as widespread as is claimed by the authors of the theories of erogenous zones. We find, in this category of phenomena, a stable connection between the psychic sexual inclination and the somatic sensation of certain regions of the body and the stimuli arising there; from the physiological point of view, the explanation of this lies probably in the existence of nerve

¹ Higier, F. S. M., pp. 33-8.

² Higier, F. S. M., p. 34.

³ Higier, F. S. M., pp. 34-5.

paths between these zones and the centres of the sexual function, or rather of a systematic community with the true centres of erection.¹

A little later, Higier adds:

The characteristic quality of these true erotogenic zones seems to be the comparative stability of the effects of stimulation, which are quite independent of the person's psychic life or of any specific sexual partner.²

In other words, we seem to have here an absolute reflex.

I have deliberately quoted Higier at some length, for he states the problem excellently, and he is certainly not suspect of partiality in favour of Freud's doctrines. Havelock Ellis also recognizes the existence of the erogenous zones, though in less precise terms. He qualifies them by their particular aptitude to provoke tumescence, and adds: "Some regions are normally so in all healthy persons."³ If this is really so, the infantile hedonicity of the zones normally erogenous in the adult must be regarded as an instance of sexual development "brick by brick," to adopt von Monakow and Mourgue's expression. If the reader refers to the terminological rules laid down above in their application to the different meanings of the word "healthy," he will be better able to judge Freud's position in qualifying that hedonicity as sexual. No protest is made against the use of "healthy" in connection with food or urine, yet health only exists formally in animals, which alone can be healthy by intrinsic definition. The case for the erogenous zones in the adult is cleared if we accept the statements of Higier and Havelock Ellis. We have the right to describe as sexual an impression which arouses stimulation of the genital zone in normal persons. We may say that, regarded separately, the sensation in the erogenous zone is only sexual by extrinsic definition. Intrinsic definition need only be conceded if the sensation in the erogenous zone were the efficient cause, in the strictest philosophical sense, of the stimulation of the genital zone. It is quite possible only to accept it as the releasing element. Thus food is not the efficient cause, in the philosophical sense, but merely the material cause of health. We have still to determine the relation of infantile hedonicity to hedonicity of the same zone in the adult, when it has become erotized. Here we are faced with the problem of ontogenesis. Biology is full of mysteries, but no aspect of it is more obscure than that of morphogenesis and physiogenesis. The way in which adult forms and functions are pre-contained in

¹ Higier, F. S. M., pp. 35-6. *Italicized in the text.*

² Higier, F. S. M., p. 36.

³ Havelock Ellis, P. S., p. 25.

embryonic forms and functions, passes our understanding. The indisputable fact is the existence of *positive* pre-ordination of the past to the *normal* future. If it is physiologically true that certain extra-genital zones are normally capable of provoking erection in all healthy adults by means of an absolute reflex, Freud, in qualifying the infantile hedonicity of these zones as sexual, has merely made an uncompromising application of the terminological rule which permits the attribution, in the extrinsic sense, to all that bears an essential conditioning relation to a certain reality, of a predicate which, in the intrinsic sense, is appropriate only to that reality.

When we remember the endless polemics started by the application of the epithet "sexual" to the infantile hedonicity of the erogenous zones, we cannot help thinking that Freud would have acted more wisely if he had not made full use of a terminological licence which only ended in misunderstanding. His opponents, taking the word "sexual" in its narrow, intrinsic sense, denied—quite justifiably—that infantile hedonicity was sexual. Freud, taking the word "sexual" in a very wide and highly extrinsic sense, claimed—not entirely without justification—that infantile hedonicity was sexual. Since the two camps did not speak the same language, the controversy was sterile. Eliminating all mere plays on words, we shall find that our investigation of the concept of the erogenous zones yields a dual conclusion. Unless we deny the existence in the normal adult of erections due to a remote absolute reflex—although it is accepted by sexologists such as Higier, who are opposed to psycho-analysis—we must recognize that in the child the hedonicity of certain zones is *positively* pre-ordained to their future capacity to provoke erection, but we must be careful not to confuse this positive pre-ordination to a normal function with the simple possibility of the formation of strictly acquired, accidental associations ending in perversions. In metaphorical language, we may say that the second case involves "associative lateralism" or "psychic decussation." An example will illustrate what we mean by this. Labial friction is normally capable of producing erection in the adult; infantile labial hedonicity is positively pre-ordained towards this normal erectile capacity, but not by any means towards intra-oral ejaculation, which constitutes an accidental and abnormal synthesis. The Freudian theory of the erogenous zones must be reconsidered, no longer in terms of the concept of "polymorphous perversion," but of that of "polymorphous pervertibility."

Here is a personally-observed case-history in which the erogenous role of the anal zone is clearly manifested from childhood. The patient Stephanie, a woman of about forty, was suffering from

anxiety neurosis. Her sexual relations gave her no feeling of relaxation. She was continually haunted by the fear of maternity, and practised coitus interruptus. Cunnilinctus afforded her the greatest degree of satisfaction. At the first session, she told me that from childhood she had possessed a very sensitive anal region, and used to give herself enemas simply for pleasure. At the fourth session, she returned to the same subject, telling me that she used to insert an enema nozzle into her anus, and thus produce a feeling of pleasure in the anal region, and then obtain further gratification by lightly pressing her vulva with her hands. At the fifth session, she spoke of the room in which, at the age of eleven or twelve, she used to obtain solitary gratification by anal stimulation. She used to give her doll enemas, and this sufficed to produce genital excitement. She had made a hole in her doll's mouth in order to give it food, and thus provide herself with a motive for giving it enemas. At the tenth session she told me that in order to obtain satisfaction in coitus her two nates had to be touching; anal stimulation was necessary. At the thirty-sixth session, the question of infantile masturbation again came up for discussion. She told me that it was not until fairly late that she began to touch her anus. She supposed that in giving her an enema, and in searching for the spot to introduce the nozzle, her nurse must have touched her vulva. She was given enemas every day. She used to amuse herself by putting little leaves into the anus of her little cousin, who was then three years old. She made her urinate and defæcate in little pails. The introduction of pieces of paper or leaves into her little cousin's anus gave her a pleasurable sensation. In this patient, the anal zone had become of such importance that normal genital sensation had been considerably lessened.

After the question of erogenous zones, that of the choice of object arises naturally. We may note, moreover, that whereas the satisfaction of the erogenous zones seems principally related to the instinct of detumescence, the choice of an object is first and foremost a manifestation of the instinct of contractation. It is however important to emphasize that the two tendencies to contractation and detumescence cannot be completely separated. We understand this better when we compare micturition and defæcation on the one hand, and sexual detumescence of the genital zone or of an erogenous zone on the other. In micturition and defæcation, the organ possessing the function of expulsion is self-sufficient, whereas sexual detumescence requires contact with something extrinsic to the organ in which that process takes place.¹ From this point of view, the

¹ Higier, F. S. M., pp. 101-2, 103, 107.

sexual function in human beings is much more like nutrition than micturition or defæcation. The existence of ejaculations without peripheral stimulus is no objection. These ejaculations depend upon psychic representations and are consequently most closely related to the tendency to contractation. The inseparability of the two tendencies to contractation and detumescence entails a very important consequence, i.e. that the division of perversions into those of object and those of aim has no more than a *relative* value. When the object is abnormal, the act is necessarily abnormal. Similarly, when the act is abnormal, its *precise* object is necessarily abnormal. The division of perversions according to object and aim has nevertheless a practical value which justifies its use. From this point of view, we may distinguish a dual aspect in the evolution of tendencies towards objects: the stimulating object is more and more exactly determined, and the motor and secretory reaction to the stimulation of the object is more and more firmly integrated. Both differentiation and integration take place.

It seems to us indisputable that Freud's statements on the progressive differentiation of the tendencies towards objects are inaccurate. In many passages, he represents it as a series of successive perversions ending at last in normality. The ultimate source of his error is clearly a certain philosophical inability to conceive of real indeterminism. His magnificently plastic imagination tyrannically impels him to harden the shifting contours of evolving life. Let us try to substitute a table of progressive differentiation of object for his unacceptable scheme of successive perversions. It must never be forgotten that this differentiation is essentially continuous. But by reason of the relations which we shall later have to define between the ætiology of the perversions and the mode of progressive evolution in the child, it is useful to distinguish various stages. At the first stage, there is a need for contact, but indifference whether that contact is with self or with others. At the second stage, the impulse is differentiated in favour of contact with others, but undifferentiated as between human beings and animals. At the third stage, the impulse is differentiated in favour of contact with human beings, but still undifferentiated as between homosexual and heterosexual contact. At the fourth stage, the impulse is fully differentiated, and no longer tends towards anything but heterosexual contact with other human beings.

So important is a clear understanding of the first stage, that in order to define it with the greatest possible precision, we shall revert to the points already set forth above. The reader will remember that, towards the end of Section I, we contrasted human sexuality

with that of a large number of marine animals in which it is confined to a simple automatism of rejection, the meeting of the gametes being left simply to chance. We pointed out that if this were so in the case of human beings, our race would soon disappear, and that consequently the complete human instinct had to comprise a component of contraction besides that of detumescence. We have gone one step further. In dealing with the question of the choice of object, we have pointed out, not only that detumescence requires contraction in order to ensure the perpetuation of the species, but that detumescence, regarded simply as such (and not as a part of the total instinct) is not sufficient in itself. Sexual detumescence, as opposed to micturition, is not governed by the will. It requires an extraceptive stimulus, either actually operative or psychically represented. Now this entails not only, as we have already said, the impossibility of a complete separation between the perversions of object and those of aim, but the further impossibility of an auto-erotic stage *in the strict sense*. It is worth stressing this point. Among non-psycho-analytical writers, as well as among the Freudians, we often find such statements as this: "Like the instinct of preservation, the primitive aim of the sexual instinct is the individual himself."¹ This formula, taken in its strict philosophical sense, is false. The writers responsible for it have confused lack of differentiation between contact with self and with others, with paradiifferentiation towards contact with self. Extraceptive contact is an original requirement of the instinct. The child's use of its hand for masturbation is not due to the fact that its instinct impels it, through paradiifferentiation, towards itself rather than others; it is simply because it is easier. Here again we may recur to our comparison with the nutritional instinct; the child's sucking its fingers is not due to the fact that the nutritional instinct first passes through an autophagous stage; it is because the child sucks any object within reach. The very first sexual impulse contains the need for contact, but is not differentiated as between the realization of this contact by another part of the individual's body, or by a part of the body of another individual. The first motor realizations of the sexual instinct are *in fact* auto-erotic, which gives the illusion of a psychic paradiifferentiation.

Once one has clearly understood how the fact of auto-erotism should be interpreted, i.e. as the motor consequence of a lack of psychic determination, the following stages need no explanation. The difficulties they may raise in connection with homosexuality and narcissism are examined later.

¹ von Monakow and Mourgue, I. B. N., p. 78.

The evolution of the tendencies towards an object comprises not only a progressive differentiation, but also an integration. This latter process concerns what Freud calls the partial tendencies. One couple of these tendencies is formed by the impulses to see and to exhibit oneself. A second, by the impulses to dominate and to be dominated. We are deliberately avoiding the use here of the terms voyeurism, exhibitionism, sadism and masochism, which denote well-defined perversions. If they are applied to the child, they inevitably lead to a confusion between non-integration and discordant integration. We should do best, perhaps, to create four words denoting the normal impulses to active and passive visual pleasure, and active and passive pleasure of domination, but we shall rest content with these expressions, and shall only apply the terms voyeurism, exhibitionism, sadism and masochism to well-defined anomalies. The reader will realize the importance of this exactness of language if he considers that, although the normal pleasure of being seen plays an important part in women, pathological exhibitionism is practically non-existent among them.¹

Infantile curiosity concerning sexual problems must be regarded as one of the most highly psychic manifestations of the instinct of contrerotation. Freud, who was the first to draw the attention of psychologists to theories of infantile sexuality and their importance in the pathogenesis of various neurotic symptoms, has admirably described this curiosity. In the course of my researches, I have been able to satisfy myself by personal observation that his statements are undoubtedly well-founded. I have, in particular, met with the theory of anal birth, and even with that of umbilical coitus. I have never, however, come across belief in oral fertilization. Freud's writings on the question of the "phallic mother" have aroused particularly scornful criticism. But reflection will show us that, unless we admit that the little boy possesses an innate knowledge of anatomy, we must grant Freud's contention that the child cannot imagine other people's bodies as any different from his own. Here is an unpublished example which shows that, in certain cases, the mistaken idea of the universality of the phallus may persist for some considerable time. A boy of fourteen asked his confessor to explain to him the mechanism of human reproduction. The priest began to tell him what took place, but the child's expression showed such an absolute lack of comprehension that he questioned him, and discovered, to his amazement, that he supposed both sexes to possess the same anatomical structure.

The Œdipus complex is the part of Freud's system which has

¹ Krafft Ebing and Moll, P. S., pp. 428-9.

perhaps aroused the most violent controversies. To continue our study of the evolution of the tendencies towards objects, we must state what position we adopt towards this burning question. We believe that three cases are to be distinguished—the genital complex, the sexual complex, and the filial complex.

The genital complex itself must be divided into three types. In the first, the process begins by excitation of the genital organs during their cleansing by the mother. A specific pleasurable sensation is produced, and consequently there arises an attachment of a sexual nature to the being who provokes that pleasure. The existence of phenomena of this kind seems to me to be beyond dispute; I would not, however, be willing to assert that they are to be found in the majority of children. A certain mother, who has given me a detailed account, which necessarily forces me to a positive conclusion, of the pleasurable stimulation of the genital zone during washing in the case of her two-year-old daughter, states that her son has never exhibited the slightest manifestation of this kind. I believe therefore that we must eschew generalizations regarding the production of a genital Œdipus complex by way of direct local stimulation. In the second type, stimulation of the genital zone is not direct, but follows that of an extra-genital erogenous zone. When such a mechanism is found in early childhood, it must be regarded as premature and quasi-adult, for it implies the accomplishment of a normally post-pubertal integration. A third type is that in which genital excitement is clearly psychogenic, due, for example, to visual or auditory stimuli. The presence of this type in early childhood is also more or less abnormal.

Genital cases are obvious, but those grouped under what I call the sexual Œdipus complex raise great difficulties of interpretation. As we said above, the sexual is primarily the genital, and secondarily whatever bears an essential causal relation to the genital. If we follow Higier and Havelock Ellis in admitting that erogenous zones in the strict sense are to be found in normal adults—we may, in order to avoid all ambiguity, describe them as erectogenic, by means of an absolute reflex—it seems to us impossible to deny that the infantile hedonicity of these zones is *positively* pre-ordained towards the future genital life, and that consequently, whoever stimulates these zones in a child *ipso facto* becomes a love-object. We must be careful to avoid a confusion here. We do not by any means claim that the kiss always affords sexual pleasure. We readily admit the existence of kisses given in simple tenderness, and find in them no sexuality in any shape or form. But between the tender kiss and the strictly erectogenic kiss, of the sexual nature of which there can

be no doubt whatever, there is the voluptuous kiss affording pleasurable bucco-labial sensations. We think it must be recognized that this voluptuous kiss is sexual. The solution of this problem is not based on introspection. We do not attempt to deny that the voluptuous kiss may be practised for a long time before it becomes erectogenic. We readily concede that children addicted to it may not have the slightest conscious orientation towards genital satisfaction. But that is not really germane. The real point of the dispute is to ascertain whether the voluptuous kiss is destined, by its very nature, to become erectogenic when the genital apparatus is sufficiently developed. If we answer this in the affirmative, we must at the same time recognize that the habit of cultivating bucco-labial sensuality between the mother and the child has every prospect of determining a psycho-sexual fixation in the latter. Of course, the word "sexual" is here used in a highly extrinsic sense, according to our previous terminological definitions.

Intensive development of the hedonicity of zones normally destined to become erectogenic in the adult is not the only means whereby a sexual Œdipus complex may be formed. That hedonicity is derived primarily from the impulse to detumescence. But we must not lose sight of the fact that the most highly psychic forms of the impulse to contractation, those aroused by visual and auditory stimuli, may also engender a sexual Œdipus complex. In cases of this kind, differential diagnosis is extremely—we should be quite ready to say, hopelessly—difficult, owing to the absence of genital reactions. It is legitimate to blame the psycho-analysts for having almost entirely neglected this semeiological problem—and that by virtue of their sexual dogmatism. As Higier quite rightly points out, the phenomenon of tender embrace, as an expression of feeling among the higher animal species, more particularly among monkeys and men, is not exclusively concerned with the sexual instinct, but expresses alike all feelings of love, attachment, friendship, and sympathy.¹

We may say, therefore, that both sexual and non-sexual contractation exist. How then are we to recognize—in the absence of any stimulation of the genital zone or of the extra-genital erogenous zones—the presence of sexual contractation? In the case of little boys, the diagnosis may be determined by a series of indications of increasing precision. A very clearly-marked partiality for the opposite sex compels us to raise the question; the selective taste for female nudity disposes us towards an affirmative answer; the

¹ Higier, F. S. M., p. 224.

localization of the psychic attraction upon the breasts makes that answer very probable; its fixation upon the genital zone enables us to discard all doubts. It must, of course, be fixation in the strict sense, and not a chance curiosity displayed amongst others. The symptoms we have just tabulated belong to a single series; their value is strongly reinforced by the presence of symptoms belonging to another series. Thus the impulse to violence aroused by female nudity is to be regarded as almost certainly derived from male sexual aggressiveness—we do not say sadism. The diagnosis of the sexual Œdipus complex will be based on the observation of these signs in the little boy's psychic attitude towards his mother.¹

Are we justified in asserting the presence of the sexual Œdipus complex when its symptomatology is absent? The orthodox Freudians answer "yes"; we have no hesitation in answering "no." The Œdipus complex must be proved, not assumed. Once more we shall recall the principle which governs our whole work; psycho-analysis must be a method, not a doctrine. If there are no indications of sexuality in the little boy's psychic attitude towards his mother, we shall quite simply regard that attitude as non-sexual. This does not imply that that non-sexual attitude towards his mother may not (often decisively) condition the child's future psycho-sexual conduct. But such conditioning, which in the case of both genital and sexual Œdipus complex is effected by means of homogeneous continuity, is, in the instance we are discussing, effected by means of heterogeneous continuity. We might again refer to the terms "associative lateralism" or "psychic decussation," used above. In order to understand this point of view, we have merely to recall one of the most striking results of Pavlov's work: "when the inhibition is initiated in one analyser, it reveals itself in other analysers as well."² If, for example, a dog has two separate conditioned stimuli, one auditory and the other visual, inhibition by differentiation of the auditory stimulus is found to affect the visual as well.³ No one dreams of concluding from this that visual stimulation is auditory, or vice versa. It would be scarcely more judicious to claim that, in cases in which inhibition of the filial sentiment later entails psycho-sexual stunting, this relation of conditioning is enough to prove the originally sexual character of the filial attitude. The sexuality or non-sexuality of the psychic attitude of a particular small boy towards his mother is merely a problem of semeiology which must be resolved

¹ We have drawn our inspiration for these criteria principally from Moll's case-history No. 76, published in Krafft Ebing and Moll, *P. S.*, pp. 188-98. Compare also p. 742 of the same work. (D.)

² Pavlov, C. R., p. 167.

³ Pavlov, C. R., pp. 167-8.

by the close examination of each particular case, and not by the systematic application of *a priori* theories. We are offering a working method, and not a stock of dogmas. If we are asked what is the relative frequency of the genital, sexual, and simple filial Œdipus complex, our reply will be easy: we know nothing whatever about it. All that we do know is that the methods hitherto applied to the study of the question of the Œdipus complex are devoid of all scientific accuracy.¹

Here are the various solutions the problem of the Œdipus complex may receive, arranged in summary tabular form:

ŒDIPUS COMPLEX	Genital.	First type.	Genital reaction is due to direct stimulation of the genital zone.	Premature quasi-adult Form
		Second type.	Genital reaction is due to stimulation of an extra-genital erogenous zone.	
		Third type.	Genital reaction is due to psychic stimulation.	
	Sexual.	First type.	By stimulation of an extra-genital erogenous zone, not followed by genital reaction.	
		Second type.	By psycho-sexual stimulation, not followed by genital reaction.	

NON-SEXUAL FILIAL COMPLEX.

We shall illustrate this abstract discussion by a personally-observed case-history, hitherto unpublished. The patient Adolphe, a bachelor of twenty-eight, a small shopkeeper by trade, came to the out-patients' department of Professor Claude's clinic. I took down particulars of his case, while Dr. Adrian Borel questioned him. He complained of peculiar impressions, e.g. people in the street seemed to him to be "carved in stone." He could not sleep at night, being unable to check the flow of his ideas. He was also suffering from

¹ We shall postpone till the next chapter the examination of Œdipus tendencies which never rise beyond the unconscious level. (D.)

heart palpitations. He was afraid of never being cured, of going mad, and was obsessed by the idea of death. A break with his mistress had greatly depressed him, and he had almost lost all interest in women. The outbreak of his illness had closely followed the death of his beloved grandmother, who had brought him up. In short, it seemed as though Adolphe might be regarded, from the clinical point of view, as an anxiety neurotic, or, if preferred, as a psychasthenic. Dr. Borel prescribed eighteen injections of calcium chloride, after which Adolphe again came to the consulting-room. He showed visible improvement, but was not yet cured. Dr. Borel, suspecting the presence of psychogenic factors, handed the patient over to me for some kind of analytical psychotherapy—orthodox psycho-analytical technique being really out of the question in an over-worked out-patient clinic.

The first session was primarily devoted to getting in touch. We reviewed the various symptoms noted at the first consultation, and found that many of them had disappeared. The patient was principally troubled by sleeplessness; I tried to reassure him by stressing the idea that no one had ever died of insomnia. From the sexual point of view, Adolphe used occasionally to have relations with prostitutes. This gave him physical relief, but no emotional satisfaction. At the second session, the patient discussed his reading; it was obvious that he was at odds with society. To prevent any misunderstanding, I told him I would never dispute his political views. He then spoke of his mother, who had died two years before. At the third session, Adolphe told me that he was sleeping better, and was less obsessed by his illness. I ventured to ask him for a dream. He dreamt that he was in the country with a friend, and that they had lifted trusses of hay with a hoist; that there had been a fire, and they had escaped. This dream reminded him of a holiday in the country at about the age of ten or eleven; he had been very much attracted by a little peasant girl of twelve or thirteen, with a fresh pink-and-white complexion. This memory aroused several more. At the age of eighteen he had been attracted by a girl, but had not dared to say anything about it. At the age of twenty, he fell in love with another girl, and courted her, but as he had wanted her to be his mistress, not his wife, she had broken with him. The fire reminded him of a girl engaged to one of his friends; he had been with her when the fire had broken out, and had at once extinguished it; these emotional circumstances had caused him to fall in love with the girl, although he had hitherto thought her cold. He had shown her no sign of his feelings. Later he told me of his ex-mistress, a divorced woman who had used all the means in her

power to attract him. He himself would never have taken the initiative. After a month of exclusively sentimental relations, during which she contrived to rouse him to a state of indescribable excitement, she gave herself to him. He achieved intromission, but felt no desire to ejaculate. This symptom of lack of ejaculation persisted for six months, and later the patient practised coitus interruptus. Observe that the associations of this session provided material which was important as increasing our knowledge of the patient, but whose causal connection with the manifest content of the dream was far from obvious. I therefore directed Adolphe's attention less towards the interpretation of the dream than towards the general tendency which he had disclosed—timidity of women. In a therapeutic analysis, the investigation of dreams is not an end in itself, but merely a means, a point which Freud stresses in his writings on technique. At the fourth session, the patient brought me a new dream. He was dressed as a runner, and came into a boys' class; a woman was teaching the class, and she read out a political order-paper. At the second account of the dream, he added that his niece of ten or twelve was there, and that the dream had ended in an ejaculation. Being dressed as a runner, almost naked, made him think of stripping scenes with his mistress. I suggested to him the interpretation that his presence in a boys' class taught by a mistress was a symbol of his timidity of women. We discussed his symptom of deficient ejaculation. It was not a question of deliberate incomplete satisfaction; the friction movements were continued for a quarter of an hour without result. Moreover he had perfectly normal ejaculations with prostitutes both before and after this period, during which nocturnal emissions also subsisted. We were therefore dealing with a clear case of psycho-neurotic inhibition.¹ Adolphe told me that the evening before his dream he had noticed the resemblance between his niece's smile and that of his mistress. In this connection, I asked whether youthful love-objects had not a particular tendency to excite him. He agreed. I told him that this again was an effect of his timidity of women. At the fifth session, Adolphe told me the following dream: He was a football player; at one moment, there was a young woman—or rather, a girl—opposite him. Her left hand was hurt. He then turned into a physician and treated it. The football reminded him that he had once been a player. The girl evoked her whom he had wanted to make his mistress at the age of twenty. Then he remembered that in his youth he had taken a girl

¹ Higier himself, although a thorough-paced organicist, admits that absence of ejaculation may be due to a psychogenic "nervous incoherence." Higier, *F. S. M.*, p. 172.

friend to a political meeting. There had been a disturbance, and the police had come to arrest the rioters. They took refuge in a café. She had looked at him tenderly; he now regretted not having taken advantage of it. Then he stopped. I told him that he was blocking. He agreed, but added that he did not know what was to come next. Then he told me that the girl made him think of his mother. After another pause, he said "I desired my mother." I asked him to explain. At about the age of sixteen or eighteen, his mother excited him sexually; the sight of her gave him erections. He used to masturbate imagining that his mother was quite naked, and that he had full coitus with her. The image of his mother was always given the first place in masturbation. He tried to replace it by that of other women, but did not always succeed. I explained, using as a simile the differentiation between the circle and the ellipse by Pavlov's dogs, how at the period of puberty, the instinct may find difficulty in achieving two different reactions to similar objects, i.e. negative sexual reaction to the mother on the one hand, and positive sexual reaction to a more or less similar woman on the other. We returned to his associations. The girl made him think of his grandmother. I asked him whether she had not excited him sexually. He answered that he had masturbated with her image too, but less often than with that of his mother. I then told him that the feelings of guilt he had experienced owing to his sexual attraction to his mother were the explanation of his timidity of women and his inability to ejaculate with his ex-mistress. He accepted my interpretation, and added, in connection with his mother, that he had come, through shame, to hate his sexual desire. At the sixth session, Adolphe told me that his mother often complained that since about the age of ten he had not been sufficiently demonstrative in his affection. He was embarrassed in her presence, and could not bring himself to embrace her. He also told me that it was not until after having had normal relations with a prostitute that he had masturbated with the image of coitus with his mother in his mind.

Here we shall end our account of Adolphe's analysis,¹ which is the clearest possible illustration of genital Œdipus complex of psychogenic origin. Let us examine the possible objections. Might not Adolphe have been a mythomaniac, taking pleasure in misleading me by an improbable sexological romance? Adolphe is primarily an anxiety type. Here are some passages from the letter of introduction written to the hospital by his physician: "There persists a (very long-standing) state of excessive anxiety in which the patient complains of a great variety of symptoms. . . . He

¹ It will be completed in the following chapter. (D.)

continually wonders how much life is left to him, and whether he will still be alive to-morrow." The whole of Dupré's doctrine is based upon the opposition between the pathology of the imagination and that of the emotional condition. Adolphe is hyper-emotional, not a mythomaniac. But however authentic Adolphe's anxiety may be, does it not render the patient highly suggestible? Could not his Œdipus complex, therefore, be an artificial product? Adolphe is undoubtedly suggestible. At the end of his first session alone with me, I told Dr. Borel that Adolphe seemed to me to be one of those very sensitive patients who improve simply because their case is receiving careful and sympathetic attention. It is no less true that I deliberately directed my investigation towards the sexual problem, but I never told this patient anything about the Œdipus complex before he himself opened the subject in the circumstances narrated above. I was expecting nothing of the kind, and was utterly surprised at this sudden unloading of exact statements. It may further be objected that Adolphe's reading rather than my words may have caused the suggestion. He had read Dr. Vachet's *The Mystery of Woman*, which was certainly unsuitable matter for an anxiety patient, and I did not fail to warn him against books of this kind. But it seems to me unlikely that a patient who is not a mythomaniac, but hyper-emotional, could have suggested to himself the concrete details which he gave me, e.g. that the image of his mother always appeared first during masturbation, that he tried to repel it, and sometimes succeeded, that he masturbated with the image of his grandmother less often than with that of his mother. I believe consequently that there is no reason whatever to dispute the existence in Adolphe, between the ages of sixteen and eighteen, of a genital Œdipus complex of psychogenic origin.

It is more difficult to determine the exact nature of Adolphe's feelings for his mother between the ages of ten and sixteen. He himself asserted that during that period the sight of his mother produced no genital reactions. At the most, therefore, there would appear to be sexual Œdipus complex of psychogenic origin; at the least, non-sexual filial complex. How are we to choose between these two hypotheses? The later evolution of the case is in favour of the sexual interpretation, but does not constitute a decisive argument, for we may admit that an originally simply filial feeling may become sexual at the very moment that it becomes genital, but not before. This hypothesis is possible in the abstract, but seems to us precluded in this actual instance owing to the growing embarrassment Adolphe felt at embracing his mother during the pre-pubertal period. This embarrassment cannot be explained except as an instinctive defence-

reaction against a growing sexual impulse. The embarrassment became particularly acute from the age of thirteen. I therefore unhesitatingly conclude that Adolphe exhibited a sexual Œdipus complex of psychogenic origin, at least since the age of thirteen.

Our own position with regard to the Œdipus problem may be summarized somewhat as follows: There are indisputable genital cases. There are sexual cases which may be regarded as certain, at least when one has taken the trouble to make a close semeiological investigation. It is contrary to the rules of sound scientific method to generalize the preceding statements; each instance must be examined separately. The method, which the Freudians use all too often, of asserting the universality of the Œdipus complex, adding that it is more or less distorted or atypical, is a deplorably artificial resort which ends in an unreal verbalism. It is obvious enough that anything may be identical with anything else, but for some distortion. When a *methodologically impartial* inquiry leads to no more than the discovery of conditioning of adult psycho-sexuality by infantile filial affectivity, there is nothing for it but to abide by that statement. When Freud asserts that "all of these affectionate impulses were originally of a completely sexual nature but have become *inhibited in their aim or sublimated*,"¹ he is making a personal profession of faith in a sensualist metaphysical system to which we do not subscribe.

The castration-complex bears—at least in the latest developments of Freud's doctrine—an importance almost equal to that of the Œdipus complex. If we wish to avoid stripping the term "castration-complex" of all exact meaning, we must carefully avoid including in it all educational attempts to inculcate a rule of sexual conduct in children. Castration-complex is only present when there is (i) belief in the possibility of amputation of the penis as a punishment, and (ii) fear that this may actually take place. The foregoing definition is only applicable to the case of the little boy; in that of the little girl, it must be transposed as follows. The castration-complex comprises: (i) belief that girls are simply boys with the penis cut off, and (ii) regret for the absence of the penis, regarded as having been cut off.

I have not had the opportunity of investigating any convincing case of male castration-complex. In the female complex, illusion of castration must be very clearly distinguished from penis-envy. One may find indisputable penis-envy, without being able to discern the least trace of belief in an earlier amputation of that organ. I have been able to observe this very clearly in the case of a female patient. At the twenty-eighth session, a young woman whom I

¹ A.S., p. 69.

shall call Irene told me a dream in which she went over a house room by room. She said that she had entered every room in the house, even those which were not usually shown to visitors. Here she confessed, with great difficulty, that she had always been extremely ashamed of the urinary function. When she went to the lavatory, she felt it necessary to invent improbable fictions rather than let her husband suspect her real purpose. At about the age of four or five, when playing with a little girl who was rather older, she had urinated before her in a little mould. She had felt an intense guilt-sense at this action. Later she had urinated on a chair, in the same position as that taken by her brothers. At the forty-eighth session, the patient said that her father had scolded her severely for her urinary habits. These habits had made her feel grown-up and out of the ordinary. Irene thought she had seen boys urinating in the street. She had had the feeling that these boys were superior. I pointed out to her the importance of this fact. She agreed, and added that in her sexual relations she enjoyed inverting the positions of the man and the woman. I indicated her jealousy of men. She replied that she used to blame her parents that she had not been born a boy. I then ventured to suggest to her that she envied the male sexual organ. She confessed that, about the age of twenty, she had sometimes had dreams that she possessed a penis. At that time she did not understand them at all, but their explanation was now clear. In this case, penis-envy is manifestly present, but I was unable to trace illusion of castration.

III. Psycho-sexual Anomalies

In our examination of sexuality, we have had more than one occasion to point out how the most normal development exhibits, not indeed a "positive pre-ordination" towards "sexual perversions," as some of Freud's less happily expressed statements would lead one to suppose, but a "negative pre-ordination," or if a less philosophical term is preferred, a receptivity of soil. We shall have to return to this approximative statement in order to justify and define it exactly. But before stating our views on the problem of the "sexual perversions," we think it will be helpful to offer some terminological comments on the expression "sexual perversions" itself.

The term "pervert" is borrowed from the language of the moralists; it forcibly suggests an idea of guilt, and consequently can only be applied, at least in the strict sense, to free acts. Now the moralists themselves have for some centuries recognized the existence of strictly necessary "psychic movements," prior to any

rational judgment, and so escaping all governance of the free will. These entirely irresponsible "first movements of the soul" are of two kinds: (i) some are due to physical causes, as in the case of hunger and thirst, and of a large number of sexual impulses; (ii) others depend upon a psychic determinism of an associative order, and this second category includes sexual manifestations as numerous, if not actually more numerous, than those comprised in the first category. When the sexual "first movements" are qualitatively abnormal, e.g. homosexual, they are branded "perversions." This is a most unfortunate expression,¹ first because it implies the absurd idea that necessary movements could be culpable, secondly because its use has the most regrettable effects in hindering the cure of sufferers. The word "perversion" ought to be rigorously banished from the vocabulary of science, and replaced by "sexopathy." Thus there would be somewhat less risk of forgetting that the sexopath is no more responsible for his anomaly than a diabetic for his glycosuria.² Of course, we are speaking simply of the anomaly itself, and not of the individual's attitude of acceptance or rejection of it.

The sexopathies may be classed in various ways. We have already met a first classification, contrasting sexopathies of object with those of aim. It is undeniably useful, and has been accepted by writers of very different tendencies. We have pointed out that it has merely a relative value, owing to the impossibility of completely separating the anomalies of object from those of aim. The distinction between disorders of differentiation and those of integration is, in the main, interchangeable with it, for differentiation is principally concerned with the object, integration with the aim. Havelock Ellis has suggested a second, quite different classification. He distinguishes homosexuality on the one hand, and erotic symbolism on the other. The principle of this classification is very interesting. If we admit (and it is really difficult not to do so) that sexual bipolarity is a reality of nature, we shall be led to deal separately with the anomaly consisting in the juxtaposition of the morphology of one sex with the instinctivity of the other. All other sexopathies will come under the head of erotic symbolism, which Havelock Ellis defines as "a condition in which the psychological sexual process is either abridged or deviated in such a way that some special part of the process, or some object or action normally on its margin or even outside it altogether, becomes, often at an early age, the chief focus of attention."³ This classification has the merit of throwing into strong relief the originality and the extreme importance of homosexuality,

¹ Cf. Havelock Ellis, P. S. pp. 126-7.

² Marañón, E. S., p. 166.

³ Havelock Ellis, P. S., p. 127.

and the weakness of failing to emphasize the very real distinction between the anomalies of object and of aim. We shall therefore keep to the usual classification, while recognizing that it is right to give homosexuality a special place. A third classification distinguishes innate from acquired disorders. It is evidently compatible with each of the foregoing, and raises a question which cannot be shelved. A fourth classification contrasts somatogenic with psychogenic sexopathies; its position is comparable to that of the foregoing. A fifth classification is of great practical importance. Prognosis is cautious or favourable according as the sexopathy alone constitutes the clinical picture (in which case we shall call it "essential sexopathy"), or as it is merely a symptom associated with a number of neurotic disorders (in which case we shall call it "symptomatic sexopathy"). Psycho-analytical experience shows, indeed, that most essential sexopaths are complacent about their anomaly, and fundamentally have not the least desire to get rid of it.

(i) *Anomalies of Object*

Let us first consider the sexopathies of object, excluding homosexuality, which we shall examine separately. The characteristic of the sexopathies constituting this particular group of disorders by paradiifferentiation is that they can never be innate *so far as their specific determining element is concerned*. This statement is absolutely clear in the case of the most representative anomaly of the group—dress fetichism. As Dr. Löwenstein very rightly points out: "In these cases, one cannot reasonably accept the existence of special innate instincts which have ladies' shoes with heels in the Louis XV style as their object."¹ The same is true of zoophilia. Take, for example, the following case-history from Moll:

A perfectly normal man (a grandfather) told us that when he was a boy he actually had an inclination for a parrot which belonged to his parents. He clearly recalled that this creature used to cause him erections, that he used to try to caress it, and that he had great difficulty in kissing its beak without being bitten.²

It is inconceivable that this patient should have possessed an innate predisposition orientating his sexuality, prior to any experience, towards the parrot in so far as the bird differed from humanity. One cannot but accept the opinion of Moll, who regards this phenomenon as a manifestation of the period of lack of differentia-

¹ Löwenstein, "La psychanalyse et la notion de constitution," in *L'Evolution psychiatrique*, 2nd series, No. 4, p. 63.

² Krafft Ebing and Moll, P. S. pp. 600-1.

tion. The fact that zoophily is principally to be found among country people is a further confirmation of our theory. The case of pederasty is rather more difficult, but it should admit of a similar solution. "I believe," writes Moll, "that pederastic inclinations must be considered essentially as acquired phenomena, although there may be a foundation of hereditary stigma."¹ The main argument upon which he relies for his conclusion is that since pederasty is mainly to be found among schoolmasters, the influence of external circumstances is clear. This statement is not without value, but, in our view, the decisive proof arises from an analysis of the attraction by the object. Here again, it is improbable to admit that there is an innate factor positively orientating the instinct of conrectation towards the child precisely in so far as he differs from the adult. No valid objection can be drawn from the cases in which pederasty has been the only psycho-sexual manifestation, for they may quite well be explained by the hypothesis that during the period of lack of differentiation, the true object of the instinct was the common characteristics both of the child and the adult, and that the element of difference distinguishing the child from the adult has gradually become a conditioned stimulus. This distinction, which at first sight may appear subtle, claims our acceptance owing to the experimental data. We have seen above that inhibition by differentiation led Pavlov to distinguish a "general part" and a "particular part"² in the stimulus. This is a vitally important conclusion, which compels us to revise many constitutional theories of the sexopathies. We therefore reject even more vigorously than Moll the concept of a pederasty in which the positive-directive element—paradifferentiation, if one prefers the term—is regarded as congenital. We might set forth an exactly similar line of argument about gerontophilia. It should be added, moreover, that this anomaly inevitably raises the Œdipus question. As for necrophily, it is very uncertain whether it constitutes a separate anomaly, for it usually seems to be merely a form of sadism. Whatever we may think of this reduction, it is impossible to accept the existence of an innate positive element orientating the instinct towards corpses as contrasted with living beings.

The foregoing brief review of the sexopathies of object other than homosexuality enables us to formulate our attempt at explanation as follows: The positive element of these anomalies is always acquired and psychogenic. To this positive element there is (or may be) added a negative and somatogenic element, consisting in a weakness of orientation of the instinct. This weakness may quite

¹ Krafft Ebing and Moll, P. S., p. 567.

² Pavlov, C. R., p. 117.

well be innate, but it may also be acquired, as is proved by the example of post-encephalitic perversions. It is difficult to maintain that this negative element is necessary. It may quite well be admitted that the exogenous causes, so long as their action is premature, violent and frequent, are enough to determine the anomaly. Our position differs very little from that of Kretschmer, who distinguishes

two factors: firstly a constitutional factor in the sense of an undifferentiated sexual impulse whose aim is not as yet clearly developed, and secondly, a psychogenic external factor which directs the still uncertain and fluctuating sexual impulse towards a definite, anomalous sexual aim, and finally anchors it there. The endogenous factor acts in these cases unspecifically; the exogenous factor acts as a specific fixator.¹

We believe, however, that Kretschmer's explanation must be modified in three particulars. Firstly, he does not clearly distinguish between the anomalies of object and of aim. We hold that in the latter, a much more considerable role may (we do not say "should") be attributed to constitution, as we shall later see in more detail. Secondly, we hold that the negative, or non-specific factor of the anomalies of object may be acquired—e.g. post-encephalitic. Thirdly, we do not think that this negative factor need necessarily be an innate or acquired stigma; it is not obvious why exogenous causes acting prematurely, violently and frequently upon normal lack of differentiation should not suffice to cause a sexopathy of object. In short, our position consists in the statement that in the anomalies of object the positive, psychogenic and acquired factor is always necessary and sometimes sufficient, whereas the negative, somatogenic, innate or acquired factor is sometimes necessary and never sufficient.

Let us illustrate these abstract considerations by some examples. I have had the opportunity of investigating a case of fairly polymorphous fetichism—without, however, being able to analyse it as deeply as I could have wished. The first sexual excitements occurred spontaneously in the patient, Anselm, at the age of eight or nine—perhaps even earlier. They were aroused by objects possessing the two qualities of shininess and close contact with some part of the human body. The patient was particularly excited by the gleaming breast-plates of cavalry soldiers, officers' patent leather belts, and later by patent-leather shoes. At night, as he lay in bed, he used to call up the fantasy of a little dwarf completely covered in a tight-

¹ Kretschmer, T. M. P. p. 132.

fitting dress of patent leather. This rather strange image was in itself sufficient to cause erection without any need for rubbing the penis, which the patient had in fact never done. Starched shirt-fronts likewise became a fetich. Later, patent shoes constituted the principal fetich-stimulus. Female corsets had also a very real capacity for provoking erections in Anselm. Without any treatment, his sexuality partially improved so that he became capable of normal and satisfactory sexual relations with a woman he loved, without feeling any need to have recourse to his fetichist imaginations. Even before his first normal sexual experience, he had successfully rid himself of his fetichism for stiff shirts by adopting a rule of behaviour whereby he paid neither more nor less attention to them than a normal man would. These tactics, which were completely successful in the case of starched linen, were a failure when applied to patent shoes. I very much question, indeed, whether they were as resolutely applied in the latter case. Thus when he reached adulthood, this patient possessed a normal sexual component, side by side with a fetichist component. The normal component gave him complete satisfaction in his sexual relations, but besides coitus, women's patent-leather shoes still held the capacity to produce a certain sexual excitement, if not actually erection. My inquiry did not lead to the discovery of any infantile trauma which might have explained the origin of this fetichism. Moreover, since Anselm suffered no distress from an anomaly which had been reduced to the proportions described, and only submitted to my investigations as a favour, I could not carry treatment as far as deep analysis. But a close examination of the sum total of data quoted above will show that this patient is not a fetichist, but a sado-fetichist. His anomaly attracts him towards objects with the double characteristic of shininess and close contact with the human body. Important evidence is the fact that the corset, which exhibits close contact, but not polish, is none the less capable of producing erection, whereas, as a counter-proof, no polished object which possesses no constricting quality is so capable. Anselm is sado-fetichist at the "manifest content" level, pure sadist at the "latent content." I could quote much material in support of my interpretation. Here is some of the evidence: At the age of seven or eight, Anselm brought about erections by imagining women shut up. The fantasy of women closely bound in manacles and fetters produced erection at an age which he could not exactly remember. The masochistic tendency found in all sadists was clearly exhibited in this patient. At about the age of ten, he used to chain his legs in order to produce erections. These details suffice to show that in this case fetichism was merely a superstructure—I

should be tempted to say, a disguise—of sadism. It is quite possible that this sexopathy may not have been caused by any infantile trauma, but I dare not assert it positively, for my investigations were not carried to sufficient lengths. In any case, even if we admit the absence of trauma as a determinant of the fetichism, this raises no difficulty against the theories maintained above concerning the always necessary and sometimes sufficient role of the positive, psychogenic and acquired factor in anomalies of object. Here indeed (and in our view, it is the point of chief interest in the case) examination of the qualities of the stimulus shows that an apparent anomaly of object is actually reducible to one of aim. "Some time ago," writes Moll, "Krafft Ebing reduced fetichism of feet and shoes to a larval masochism, the 'motivation' of which merely remained unconscious."¹ This point of view is applicable to the present case, for I may add that about the age of twelve or thirteen, the patient used to cramp his feet into patent-leather shoes in order to produce erection. I believe, however, that in his case sadism was clearly more important than masochism. Krafft Ebing has yielded to the temptation of giving his theory a general bearing, in which he is certainly mistaken. It is indisputable that an autonomous fetichism exists beside fetichism of sado-masochistic origin.

We are now going to pass from an essential to a symptomatic sexopathy. Oscar is primarily a neurotic, but although interesting in proportion to its complication, this aspect of his psychism does not come within the terms of reference of this chapter.² I shall refer to one only of his numerous sexual disorders—zoophily. Oscar was excited by the sight of horses, and also by that of a chicken being bled. The stimulation by horses is very simply explained; Oscar used to go riding, and the motion used to cause him purely mechanical erections and ejaculations. That by chickens being bled is obviously sadistic, for it is important to notice that the patient reacts, not to chickens in general, but to the scene of the decapitation of a chicken. The two apparent tendencies to zoophily are respectively reducible to a conditioned reflex and to sadism.

I have had no opportunity of directly investigating any cases of pederasty, although I have studied such a patient through written documents. Since this method of investigation is very defective, I wish to emphasize that I do not claim to draw conclusions from the few facts in the life of this sexopath which I am about to quote. At the age of twenty-nine, the patient Jerome practised mutual

¹ Krafft Ebing and Moll, P. S. p. 719.

² In forty sessions, I succeeded merely in outlining the explanation of this patient's symptoms. (D.)

masturbation with small boys. He had masturbated since about the age of fourteen, usually alone. He stated that he had had no important focusing-point for his fantasies during these practices, and that he was simply satisfying a physical need. He said that he had never had sexual relations with a woman. If we accept this patient's statements as true, we are led to suspect arrested development of the instinct of contrerectation. Jerome certainly seems to have had no distaste for heterosexual relations, but—and this seems to me of vital importance—there is no trace, in any of the written evidence I had the opportunity to examine, of any *positive* attraction to women. We must be careful not to confuse the absence of distaste with the presence of attraction. Briefly, the absence of any heterosexual relation, satisfaction achieved only by purely physical masturbation, during which the patient did not picture to himself any erotic scenes, the absence of any evidence that female attraction had ever been experienced, even on a single occasion—all this tends to make me conclude that Jerome's pederasty is merely an accidental fixation, primarily due to a pathological prolongation of the period of lack of differentiation. I repeat that the defective circumstances of my examination of the case do not permit me to adopt any categorical position.

I have not investigated any case of gerontophilia or necrophilia.

(ii) *Homosexuality*

As we have seen above, homosexuality requires a separate consideration. We must first agree upon the exact meaning of the word. Three characteristics are necessary in strict inversion: (i) erotic attraction towards the same sex, the essential criterion of which is psychogenic erection in response to the homosexual object; (ii) total absence of erotic attraction towards the opposite sex, distinguishable by the fact that the patient has no experience whatever of psychogenic erection or sexual discharge in response to a heterosexual object; (iii) positive distaste for the other sex (*horror feminae*). There are very few cases of absolutely typical inversion, and we may even inquire whether it is possible to furnish rigorous proof of total lack of heterosexual excitability in any given patient. Homosexuals' views of their own condition are very tendentious, and their statements must be carefully and critically sifted. Even if they are sincere, their assertions must not be blindly trusted, for they are not aware of their exact feelings towards women.¹ Here we are once again faced with the cardinal difficulty of the sexologist—exact definition of the relations between the sexual and the genital. Complete absence

¹ Krafft Ebing and Moll, P. S., p. 765.

of psychogenic erection and sexual discharge in response to a heterosexual object only constitutes major grounds for presumption, and not an absolute proof of total lack of heterosexual excitability. The convergence of other indications furnished by the investigation of the patient's general attitude may prove the existence of an indisputable heterosexual excitability which is too weak to release clearly genital reactions.

Krafft Ebing long ago suggested a famous classification of the different varieties of homosexuality. The first degree includes the instances of psycho-sexual hermaphroditism, in which there is an erotic response to both sexes. The second degree is strict homosexuality or uranianism, characterized by an exclusive inclination towards the same sex. In the third degree, characterological inversion is added to that of the erotic inclination. The fourth degree exhibits not only erotic and characterological inversion, but partial morphological inversion.¹ This classification is certainly very logical; unfortunately it fails to fit the complexity of the facts. Some men who exhibit characterological effeminacy are wholly heterosexual by instinct. The same is true of morphological effeminacy. It therefore seems preferable to consider—at least as a starting-point—only disorders of the instinct, and to distinguish merely two instances: that in which the instinct is directed towards both sexes, and that in which it is directed exclusively towards individuals of the same sex as the patient. The first we shall call bisexuality, the second, strict homosexuality.

Inversion raises, in a particularly acute form, the problem of the relations between psychic and somatic causes. We have said that, as a unique exception among the anomalies of object, homosexuality *might*, without absurdity, be regarded as innate in its specific and governing element, or, if preferred, in its paradifferentiation. This important point has already been stressed, more or less clearly, by various sexologists, especially by Moll.² But the latter does not carry his analysis to its conclusion. Innate paradifferentiation may be manifested either early or late in the patient's development. It is important never to lose sight of the fact that an early paradifferentiation is no more necessarily innate than a late paradifferentiation is necessarily acquired.³ It is obvious, on the contrary, that if the paradifferentiation is innate, it is of somatic, if acquired, of psychic ætiology.

Innate inversion is a conceivable hypothesis. That is all that we mean to assert for the present. Is this hypothesis realized in fact?

¹ Krafft Ebing and Moll, P. S., pp. 89, 449–50.

² *Idem.*, P. S., p. 709.

³ *Idem.*, P. S., p. 439.

And if so, what are the signs by which a differential diagnosis may be established? These are the two questions to which we shall attempt to find an answer. But before launching on our discussion, we must make an observation of vital practical importance. *We have no right to deduce fatalism from innateness.*

It is obvious [writes Moll] that congenital predispositions often do not develop, although they may have been strongly transmitted to the descendant. In many cases of sexual perversion, we must take account of the fact that the predisposition may perhaps be congenital, but only reaches development in favourable circumstances. Let us apply this principle to homosexuality, for example. Given the instance of a male individual, who possesses a hereditary predisposition to react to the charms of his own sex; we may suppose that this predisposition is developed if the conditions are unfavourable to the individual, but not otherwise.¹

In order to approach the investigation of the hypothesis of innate inversion in true biological style, we should have had first to have solved the problem of sex determination. Now we may say, without being too pessimistic, that so far as this fundamental question is concerned, the biologists' controversy is taking place in a real chaos.² In the English-speaking countries, in which genetical researches have made great strides, the greatest importance is attached to explanations in terms of chromosomes. In France, on the contrary, where genetics has been neglected to a quite astonishing degree, whereas great attention has been paid to endocrinology, there is a tendency to consider only the action of the hormones. We must not forget to mention that certain writers lay great stress on the role of metabolism. We are therefore confronted with genetic, metabolic and hormonal theories.³ The disorder and discordance have been further increased by the fact that biologists are apt to restrict their study to the invertebrates and the lower vertebrates, whereas physicians have primarily concentrated upon the higher vertebrates. This partitioning of research has given rise to the idea that there is no general solution to the problem of sex determination. Rare indeed are the biologists who have felt that modern work on the subject suffers from the fundamental blemish of lack of co-ordination.⁴ Yet this fact immediately strikes anyone who chooses the methodological approach to this primal chapter of biology.

To-day, the biological explanations of homosexuality rely principally on the data of endocrinology. Marañón may be regarded as

¹ Krafft Ebing and Moll, P. S., p. 708.

² Cf. Hesnard, T. S., pp. 73-9.

³ Goldschmidt, D. S. I., pp. 118-19.

⁴ Goldschmidt, D. S. I., pp. 144-5.

the leading representative of this school. We shall therefore expound and discuss his system.

The first point to notice is the limited bearing which Marañon himself ascribes to his theory. He expressly states that we must attribute a primary role to the co-operation of psychological factors in the pathogenesis of homosexuality.¹ Whereas in his view normal heterosexual differentiation "appears to be an instinctive, vegetative phenomenon—as though the obscure genius of the species presided over it—of a principally hormonal nature, associated with the evolutionary differentiation of the reproductive gland,"² the explanation of homosexuality, on the contrary, seems to require a much more complicated hypothesis. It appears to be derived from a negative organic cause, responsible for the lack of differentiation, and from a positive psychic cause, responsible for the paradifferentiation. Marañon's thought is rather confused, but we do not think it a travesty to represent it thus. Here, too, are some quotations.

In the first place [he writes] it may happen that, through anatomical bisexuality of the gonad, the specific orientation of the libido is not accomplished, and that it remains in the undifferentiated condition, exactly analogous with that which we have seen presented by the sex of children. Here I must repeat that *the sex of inverts in most cases resembles not so much feminine sex*—as the vulgar and many scientists believe—*as this infantile sex*, with its polymorphous tendency and its indetermination of the object so well described by Freud.³

This passage categorically states the negative role of the organic component. A little later, Mara on thus describes the positive role of the psychic component :

To this backwardness in the differentiation of the libido, which I regard as essential in the genesis of homosexuality—one example more of the chronological signification which from my point of view intersexuality in general possesses—are added the same normal pathological factors which condition the erotic reflex, but which now act in the opposite direction. The confessions of many intelligent homosexuals have satisfied me that, in fact, an essential element in the genesis of their inversion was *this association—perhaps purely accidental—of the virile archetype with their first erotic experiences*. In this case, the erotic reflex remains permanently conditioned by the physical or psychical accidents of virility; and so homosexuality is engendered *in the same way, as Lipschütz very truly remarks, as fetishism is engendered*. It is evidently very unlikely that this will

¹ Marañon, E. S., p. 167.

² Marañon, E. S., p. 180.

³ Marañon, E. S., p. 184.

occur—let me repeat—except in cases of accentuated organic bisexuality, and in this my explanation differs from that of the majority of psychiatrists, who *attribute the whole responsibility to psychogenic influences*. In my view, the constitutional factor will sometimes be the predominant one; sometimes the conditioning physical factors will predominate; but in all cases the collaboration of both must be admitted.¹

If the mechanism of formation of homosexuality is the same as that of fetichism, that prototype of acquired anomalies, it is clear that in Marañón's view the paradifferentiating element of inversion is always acquired and psychogenic.

It follows from this point of view [he continues] that I do not admit the classic division of homosexuals into *congenital and acquired*. *From my point of view all are congenital and acquired at one and the same time.*²

We see that Marañón is content to apply to male inversion (for as we shall see later, he explains female inversion differently) a general schema absolutely analogous to that which we suggested above for the sexopathies of object. It therefore seems that a discussion of his system would serve no useful purpose. We must however examine it, for some writers use Marañón's arguments as a basis from which they reach conclusions which are much more radical than his own. Marañón's prestige is often invoked to support an *exclusively* biological interpretation of homosexuality. This is due to the fact that the proofs upon which he relies have a general bearing, and lead logically beyond the conciliatory conclusion at which Marañón's prudence counselled him to stop. They must therefore be sifted.

The fundamental idea of Marañón's theory is that the "masculine" and the "feminine" are not the results of a bifurcation, but are consecutive stages on a "one-way" street.

My particular concept of the evolution of sex leads me to consider it in its totality as a constant biological value, equivalent alike in the one sex and the other, which develops in every human being in the same direction: from the "feminine" towards the "masculine"—naturally with a rhythm, a duration, and an intensity which vary in the different phases of evolution in the case of the man and in the case of the woman.³

A little later, he is still more precise: "The *masculine* and the *feminine* are not two diametrically opposed entities, but successive

¹ Marañón, E. S., pp. 185-6.

² Marañón, E. S., p. 193.

³ Marañón, E. S., p. 7.

degrees in the development of a single function—sex. This is dormant in childhood and old age, and is active during the central period of life with purely quantitative and chronological differences as between one sex and the other.”¹

*The study of the morphology of sex [states Marañon] clearly indicates that the woman has stopped short at a stage of hypoevolution in relation to the man—the true terminal form of sex—in a position midway between the adult man and the adolescent.*²

Having laid down this principle, Marañon proceeds to deduce its consequences with a pitiless logic. We shall only quote such as directly concern our subject. “*In a certain sense the libido, as a differentiated energy, is a force of virile significance. We may say as much as regards the orgasm.*”³ We remember that in Freud’s view “*the libido is regularly and lawfully of a masculine nature, whether in the man or in the woman; and if we consider its object, this may be either the man or the woman.*”⁴ But there is an essential difference between Freud and Marañon. When the former maintains that the libido is of a masculine nature, he is merely advancing a purely theoretical speculation, and is careful not to conclude, as Marañon explicitly concludes, that “*the non-indispensable, debilitated, and belated orgasm of the woman is, to all appearance, of a viriloid, intermediate nature.*”⁵ In fact, Marañon only regards as typical characteristics of female sexuality attraction towards men and diffuse sensitivity to caresses, but not full release in orgasm.⁶ This means, to speak plainly, that in his view semi-frigidity is normal in women.

Another consequence of the “one-way” theory is that, in Marañon’s view,

*homosexuality in the woman presents an essential difference deriving from the position of her sex in a zone midway between adolescence and masculinity. The man, in fact, inasmuch as he is a “terminal sexual phase”, can only be inverted in the regressive sense which I have indicated. In the woman, there is a possibility of two types of inversion: regressive towards puerility, and progressive towards virility.*⁷

The proofs that may be adduced in favour of Marañon’s theory of homosexuality are drawn partially from observations of human patients, and partly from experiments performed upon animals.

The proofs afforded by human clinical experience may be sum-

¹ Marañon, E. S., p. 16.

³ Marañon, E. S., pp. 72–3.

⁵ Marañon, E. S., p. 80.

⁷ Marañon, E. S., p. 199.

² Marañon, E. S., p. 65.

⁴ T. C. S., p. 77. Italicized in the text.

⁶ Marañon, E. S., p. 76 (note).

marized as follows: Firstly, it is certain that the libido is conditioned "by a chemical, a hormonal phenomenon: namely, testicular secretion in the male, and ovarian secretion in the female."¹ We are therefore led to suppose that the experience of a homosexual impulse is due, in the man, to the influence of an essentially female increment, in the woman, to that of an essentially male secretion.² Secondly, Steinach believed that he found in the testicles of invert cells which resembled the luteal cells of the ovary. His results have not been confirmed. But Marañón, insisting on the idea that the morphological criteria of histology do not permit of any final settlement of a problem of chemistry, hopes that this failure is only temporary.³ Thirdly,

several authors have endeavoured to combat homosexuality by replacing the testicles of the invert by those of a healthy man; or by grafting upon him the testicle of a monkey, in accordance with the technique of Voronoff, with results which are favourable, though still subject to criticism.⁴

Fourthly, "*in a large number of homosexuals, together with inversion of the instinct, one discovers a significant parallel inversion of the somatic characters.*"⁵ The last argument is that upon which Marañón has laid the greatest stress. He reviews a series of characteristics, and after having asserted that "*at least two-thirds of homosexual men present strong physical signs of intersexuality,*"⁶ he adds that many transient manifestations of intersexuality, exhibited at puberty, escape observation,⁷ so that in fact "the number of homosexuals with morphological signs of intersexuality approaches 100 per cent."⁸

Pézarid's experiments on the sexuality of poultry are regarded by some writers as one of the strongest pillars of the endocrine theory of homosexuality. As they are very well known, we shall simply take a summary glance at them. Prepubertal castration of the cockerel brings about regression of the comb, but modifies neither the plumage nor the spurs. This suggests the hypothesis that the comb is a male characteristic, whereas the plumage and spurs are neutral.⁹ Ovaryectomy of the pullet causes growth of the spurs, and at the next annual moult, the plumage becomes characteristically male both in form and colour. This fully confirms the hypothesis that the spurs and the plumage are really neutral, not male characteristics. They

¹ Marañón, E. S., p. 167.

³ Marañón, E. S., p. 168.

⁵ Marañón, E. S., p. 170.

⁷ Marañón, E. S., p. 175.

⁹ Hesnard, T. S., pp. 144-5.

² Marañón, E. S., p. 167.

⁴ Marañón, E. S., pp. 168-9.

⁶ Marañón, E. S., p. 175.

⁸ Marañón, E. S., p. 176.

are potentially common to both sexes, and their non-development in the female is due to the fact that their growth is inhibited by the obstructive or retarding influence of the ovary.¹ This concept of "neuter" or "specific form," of heritage common to both sexes, is of vital importance. Later we shall have to inquire how far it tallies with Marañón's "one-way" theories of the evolution of sexuality. The castration experiments are supplemented by grafting experiments. Testicular grafts upon a castrated cock, and ovarian grafts upon a castrated hen cause the reappearance of the secondary sexual characteristics at the stage they had reached prior to castration.² Of even greater interest to the solution of the problem with which we are dealing are the experiments in so-called "experimental sexual inversion." Pézard grafts onto the castrated bird the gland of the opposite sex. The cock thus "feminized" becomes morphologically similar to a hen; so too the "masculinized" hen takes on the external appearance of a cock. There is, however, a limitation which we must not forget.

The feminized cock and the masculinized hen are unfit for copulation. At the same time, indeed, as the sexual passages (vas deferens and oviduct) remain infantile, as in the case of capons, the residual traces marking the passages of the opposite sex are not roused to activity under these new hormonal conditions. The important consequence of this is that the individual, although the gametes of his new sex (spermatozoid or ovular) mature, remains incapable of expelling them and of performing a reproductive function. Such individuals, although apparently possessing all the characteristics of the other sex, yet have no means of realizing their sexuality, that is to say, have acquired nothing that is essential—not to the sexual attitude in general, but to the erotic attitude in particular.³

In a final series of experiments, Pézard castrates the young individual, and then grafts onto him the glands both of his original and of the opposite sex, thus obtaining hermaphrodites of mixed sexual characteristics.⁴

Is the "one-way" concept, which is the most original point in Marañón's doctrine, based upon solid foundations? We think not. It seems to us, indeed, impossible not to draw from the existence of the "neuter form," so clearly established by Pézard's experiments, the conclusion that the masculine and the feminine represent the final ends of a bifurcation whose starting-point is this very "neuter form." Pézard himself regards this "neuter form" as "the common

¹ Hesnard, T. S., pp. 145-6.

² Hesnard, T. S., pp. 150-1.

³ Hesnard, T. S., pp. 153-4.

⁴ Hesnard, T. S., p. 155.

heritage of the male and the female of the species, upon the foundation of which there is built at puberty, under the control of the sexual glands, the definitive male or female organism.”¹ Marañón has fully realized the obstacle raised against his doctrine by the concept of “specific form,” and has tried to get rid of it. Tandler and Gross, on the one hand, and Lipschütz on the other, had maintained that “when the testicles of a male are removed, there is to be observed, not feminoid inversion, but a *eunuchoid, asexual form*.”² Marañón protests against this assertion, and declares, in the name of clinical research, that one has no right to apply to man the data gathered from inferior species. Close examination of this reply will soon show us that it treblely contravenes the general rules of scientific method. Firstly, it is contrary to the principle of economy to multiply particular solutions where one general solution is possible. Sexuality is a biological fact of an absolutely general bearing, and although it is legitimate to suppose that human sexuality has some specific element in its determination, it is impossible to define the exact scope of this specific element without comparing it with a general explanatory hypothesis. Now the point of view of general biology is treated in a very feeble manner in Marañón’s book. To realize this, we need only compare it with Goldschmidt’s work, *Sex-determination and Intersexuality*. Goldschmidt has sought to determine the respective part played by the genetic, metabolic and hormonal factors *at the various levels on the animal scale*. The breadth of this approach contrasts strongly with Marañón’s restriction of the problem. Secondly, clinical results are derived from observation, those of general biology from experimentation. Now it is an elementary rule of methodology that, so far as the dispensation of proof is concerned, experimentation has a value indisputably higher than that of observation. Mendel’s laws, although applicable to man, could never have been discovered simply through the observation of human events. The way in which certain anomalies such as hæmophilia, for example, are transmitted by heredity, remained an insoluble problem for medicine until the advent of the Mendelian solution. Now it must never be forgotten that this solution proceeds from very simple crossing-experiments with yellow and green sweet peas. Thirdly, if clinical results were really in opposition to those of general biology one might understand Marañón’s attitude. But when we seek to discover why he regards a particular characteristic as feminoid rather than neuter, we find, to our astonishment, that he gives no proof whatever,

¹ Hesnard, T. S., p. 147. This simplified formula does not pay sufficient attention to the genetic factors. (D.)

² Marañón, E. S., p. 122,

and is content with the simple observation that the characteristic in question exists, as a general rule, only in the woman. This may be called "making clinical research speak where in fact it is silent," for it is really improper to claim the testimony of clinical research in favour of a systematically advanced *petitio principii*. A characteristic which, as a general rule, exists in the woman and not in the man, is a "female" characteristic in the purely superficial and descriptive sense of natural history, as it was understood before the introduction of the experimental method into the biological sciences. To-day, it is impossible to cling to such rudimentary classifications. The problem of neuter characteristics is inescapable, and since it is impossible, for deontological reasons, to make castration and grafting experiments of the homologous or heterologous sexual gland upon human beings, we are bound to conclude that we are very ignorant of what, in the human species, is a true secondary sexual characteristic, and what is neuter. The question is further complicated by the introduction of the concept of ambisexual characteristic, for which Champy is responsible. Champy uses this term to describe "the phenomena of development or of attitude, morphological or functional, connected with the presence of the genital glands or with their maturity, which are common to both sexes."¹ Pézard had already noticed the regression of the comb both in the female and in the male capon, but, being primarily concerned with the differential sexual characteristics, he had not studied this ambisexual phenomenon for its own sake. Champy re-investigated the question, and determined which elements, in the morphology and physiology of the comb, must be attributed to differential sexuality, and which are related to ambisexuality. We must not forget to add that in the determination of the sexual characteristics, the genetic data must always be balanced with those of endocrinology. We therefore hold that Marañón's "one-way" theory of the sexual evolution is a point of view with an insufficient experimental basis.

Nor again can we allow the consequences of the "one-way" concept. The assertion of the normality of semi-frigidity in the woman is an unacceptable paradox. All gynæcologists are agreed in recognizing that the female orgasm is slow and difficult to produce, but these negative characteristics have their positive counterpart: when the orgasm takes place in women, it has a peculiar quality of fullness not to be found in the male orgasm. In order utterly to refute the idea that the female orgasm is a viriloid characteristic, we should have to give a detailed demonstration of the physiological and

¹ Tusques, *Les caractères ambosexuels et l'ambosexualité des hormones sexuelles*, p. 4.

psychological reactions of each sex during coitus. But that would exceed the limits of the present work.

The contrast which Marañón establishes between the two forms of female homosexuality is reduced to the purely clinical distinction between lack of differentiation, or bisexuality, on the one hand, and paradiifferentiation, or true homosexuality, on the other. This classification is tantamount to that which we suggested above for male homosexuality. To maintain that true female homosexuality is in any sense "progressive" is to fall into mere verbalism.

The concept of intersexuality is as ill-defined in Marañón's work as the "one-way" concept. He writes that "Goldschmidt was the first to group all forms of confused sex under the name of 'intersexuality.'"¹ This formula is by no means an adequate statement of Goldschmidt's thought. Whereas Marañón takes the word "intersexuality" in a vague and purely descriptive sense, Goldschmidt takes it in an extremely precise and ætiological sense. The German biologist distinguishes three instances of more or less mixed sexuality: monœcism, gynandromorphism, and intersexuality.² Monœcism is "the normal, functional presence of both sexes in the same individual, either simultaneously, as in the Cestodes and certain Molluscs, or consecutively, as in certain Crustacea and Molluscs."³ Gynandromorphism is the anomaly of the individual who "exhibits externally as it were a mosaic of both sexes. The majority of gynandromorphs, which are primarily to be found among the Insects, is more or less exactly bipartite, one part being female, the other male. It is also possible to find the most diverse combinations, even to the extent of a very complicated confusion of the male and female parts."⁴ Gynandromorphism is "a purely genetic phenomenon, of fairly simple origin. Every cytological disorder which ends in the formation of two different nuclei, so far as the X-chromosomes are concerned, produces gynandromorphs."⁵ It has been possible to study this phenomenon in detail in two instances. The first is that of the silk-worm. Genetic analysis of crossings shows that the sexual difference of the two nuclei is the result of a double fertilization. It is vitally important to note that this genetic interpretation may be directly verified by cytological investigation.⁶ The second instance is that of the *Drosophila*. Genetic analysis shows that one of the two X has been lost in the process of cellular division. But here cytological demonstration has so far been lacking.⁷ Let us note, in order

¹ Marañón, E. S., p. 18.

³ Goldschmidt, D. S. I., p. 37.

⁵ Goldschmidt, D. S. I., p. 39.

⁷ Goldschmidt, D. S. I., pp. 45-8.

² Goldschmidt, D. S. I., pp. 36-7.

⁴ Goldschmidt, D. S. I., pp. 37-8.

⁶ Goldschmidt, D. S. I., pp. 42-5.

to prevent a possibility of serious confusion, that Pérezard has used the word "gynandromorphism" to denote a different phenomenon. Pérezard

castrated a cock and then grafted an ovary onto it. The bird was at the time partly plumed. The cock's plumes lasted until the next moult, but, in the plumed part, the follicles at once began to regenerate feathers of female character, under the influence of the hormones of the engrafted ovary. If there were growing feathers at the moment of the operation, they kept the male form and colour at the tip, whereas the base, which grew later, showed female characteristics.¹

It is clear that we must not give the same name to this mosaic of hormonal origin as to that of genetic origin investigated by Goldschmidt under the name of gynandromorphism.

Intersexuality is the anomaly of the individual "who begins his development with his genotypical sex, and ends it with the opposite sex."² As contrasted with the instance of the gynandromorph, all the cells of the intersexual have the same chromosome distribution, that of the genotypical sex. An intersexual may begin his development as a male and end it as a female, or begin it as a female and end it as a male. The visible structure of the intersexual depends upon the point in time at which the change of sex occurs, which Goldschmidt calls "turning-point." In his experiments upon the butterfly *Lymantria dispar*, Goldschmidt was able to produce at will every degree of intersexuality and complete transformation of sex in both directions, according to rules wholly within the control of the experimenter.³ For a justification of these statements, we must refer the reader to Goldschmidt's book.

We have said enough to make clear the regrettably inexact acceptance of the word "intersexuality" in Marañón's work. He lumps under this head all the phenomena of confused sexuality, although the analysis of the mechanism whereby they are produced enables them to be clearly differentiated. Thus he classes as intersexuality gynæcomastia and hypospadias,⁴ whereas Goldschmidt has reached the conclusion that these phenomena do not result from the mechanism of zygotic intersexuality.⁵ The confusion in which Marañón labours is rooted in a fundamental methodological defect: he has been content with observation of human events, and has neglected the experimental results of general biology.

¹ Goldschmidt, D. S. I., pp. 147-9.

³ Goldschmidt, D. S., pp. 50-2.

⁵ Goldschmidt, D. S. I., p. 181.

² Goldschmidt, D. S. I., p. 49.

⁴ Marañón, E. S., pp. 130-46.

The foregoing considerations will enable us to dwell no longer upon the discussion of Marañon's arguments in favour of his hormonal conception of homosexuality. The first argument, drawn from the conditioning of the libido by gonadal secretion, is merely a simple indication, and one can deduce no decisive conclusion from it. The second argument, which consists in the hope that the results produced by Steinach (on the existence of special cells in the testicles of inverts) will be given fresh value by further discoveries, deserves no more than Moll's disdainful reply: "Meanwhile, the whole edifice is still in the clouds."¹ The third argument, based upon the results of the treatment of homosexuality by testicular grafting, is, on Marañon's own admission, quite open to criticism in the actual state of research. The fourth argument, founded on the presence of physical signs of intersexuality in homosexuals, is the true basis of Marañon's theory. After what we have said above, it is hardly difficult to demonstrate its instability. To have any convincing value, the real nature of the signs in question would have to be elucidated. Now, we have seen that at present it is usually impossible to know whether a given somatic characteristic is neuter, ambisexual, or feminoid. Moreover, the word "intersexuality" has an absolutely exact meaning, derived from meticulous experimental researches; it possesses a limited application to well-determined phenomena, and must not be used in a vague sense, as Marañon uses it. It is not too severe to conclude that Marañon's whole demonstration must be reconstructed from its foundations if it is to be given any value.

The quotation of Pézard's experiments to support a purely biological interpretation of homosexuality will not detain us any longer. It is enough to point out that, as Hesnard very rightly says, "these fine experiments have produced instances of somatic and partly functional sexual transformation; but they have never contrived to produce a single instance of true erotic perversion."² Indeed, when Pézard speaks of experimental sexual inversion, his use of the word "inversion" does not imply homosexuality with its discrepancy between somatic sexuality and the orientation of the instinct towards the object, but the changing of sex with concordance between morphology and instinctivity. The same must be said of the still more decisive experiments of Harms and Ponse on toads.

The contribution of general biology to the problem of the existence of a homosexuality by innate paradifferentiation seems at present to be primarily negative.

¹ Krafft Ebing and Moll, P. S., p. 727.

² Hesnard, "Homosexualité et endocrines," in *L'Evolution psychiatrique*, new series, vol. iii, part i, p. 46.

The biologist [writes Goldschmidt] can only give his verdict on this vexed question with the greatest caution. I must acknowledge that earlier (1916) I was less prudent. I thought myself entitled, from my study of the literature of the subject, to class homosexuality—naturally this only implies such homosexuality as may be indisputably innate—as a form of incipient intersexuality. I can no longer maintain this point of view. All that we have discussed in the preceding chapters makes it very difficult to find a place for the homosexuals of both sexes among the list of intersexuals.¹

This quotation from the great specialist in intersexuality is a very timely recall to prudence and to the critical spirit in face of the uncontrolled assertions of certain sexologists who, departing from Goldschmidt's rigorous terminology, attribute a vague meaning to the word "intersexuality." This lack of precision enables them to class homosexuality among the intersexual phenomena. It is thus, for example, that Havelock Ellis writes: "When we deal with homosexuality, we are still in the intersexual sphere."² The truth is that in the present state of research into intersexuality, this point of view is untenable.

Whereas the existence of a homosexuality by innate paradifferentiation cannot be demonstrated by general biology, the assertion of its existence could be based only on psychoclinical data. The proof seems no less difficult to furnish in this field. We have distinguished two questions above: Does innate homosexuality exist in fact? And if so, what are the signs whereby a differential diagnosis may be established? From the moment that the problem must be solved by the resources of psychoclinical investigation alone, the two problems are reduced to one: Are there any signs which can only be explained by an innate anomaly? No doubt there are signs which point towards the hypothesis of an acquired and psychogenic paradifferentiation. Attraction towards a sexual object midway between the typical man and the typical woman, such as the pubescent, comes into this category. Moll has very well developed this point of view. He observes that, in the hypothesis of what we have just called an innate paradifferentiation, the erotic object of the homosexual ought to be the same as that of the woman, i.e. the adult man. Now, from statistics based on the investigation of 500 cases, Moll estimates that 70 per cent. of homosexuals

exhibit their marked inclination for non-adult men in the fact that they detest a beard in their partner. Only the hairs of the young

¹ Goldschmidt, *Die sexuellen Zwischenstufen*, p. 432.

² Havelock Ellis, P. S., p. 196.

beard have any attraction for them. They spurn a man with moustaches with the same indignation as the normal man would. This aversion for beards can no longer be included in the concept of opposite secondary sexual characteristics.¹

The inclination of most homosexuals for prepubertal boys and their aversion to beards can only be explained as remnants of the period of lack of differentiation. Conversely, we may say that the instances in which the homosexual inclination has the normal adult man as the object are probably innate.² But it is important to note that we are not dealing with a certainty, and that even the instances of this kind may be acquired and psychogenic.

The only scientifically legitimate conclusion which we can formulate is simply a confession of ignorance. In the present state of our knowledge, homosexuality by innate paradifferentiation is no more than a conceivable hypothesis which we cannot prove true or false.

Freud's attitude to the problem of homosexuality has been particularly reserved. He has explicitly stressed the necessity of taking the biological factors into account.

It is not for psychoanalysis [he writes] to solve the problem of homosexuality. It must rest content with disclosing the psychical mechanisms that resulted in determination of the object-choice, and with tracing the paths leading from them to the instinctual basis of the disposition. There its work ends, and it leaves the rest to biological research.³

This prudence deserves great praise.

There is one point, important for the philosopher, which we should like to discuss before passing on to the treatment of homosexuality. The concept of "bisexuality" does not coincide exactly with that of "undifferentiated sexuality." The first concept is of a spatial and quantitative order; it suggests the image of two concrete, antagonistic forces, giving place to a no less concrete resultant. The second concept is of an abstract order, and cannot be represented figuratively. Biologists, whose ordinary work by no means trains them to abstraction, have a tendency to adopt the first point of view. They often find it extremely difficult, sometimes even impossible, to conceive the second. They more or less inevitably confuse an abstract with a mean term. If inversion is really an anomaly of object, which it is clearly difficult to dispute, we believe that the psychological viewpoint of "undifferentiated sexuality" is more adequate

¹ Krafft Ebing and Moll, P. S., p. 730.

² *Idem.*, P. S., p. 731.

³ H. W., p. 230.

to the reality we are discussing than the quantitative viewpoint of "bisexuality."

The psycho-therapeutics of homosexuality may be reduced to three: suggestion, Moll's associative therapy, and psycho-analysis.

Suggestion, with or without hypnosis, is to-day more or less abandoned. It was once used by various writers, especially by Schrenk-Notzing.¹ It is very probable that, after having been over-estimated in the past, this process is to-day unjustly under-estimated. Pavlov's work has made it impossible to maintain the condemnation levelled against hypnosis by Babiniski and Dupré.

Moll's association-therapy is, like suggestion, a synthetic and constructive method. It consists in finding the meeting-point between the anomaly and the normal impulse so as progressively to reinforce the latter, guiding the transitional stages.² Moll has made frequent and successful application of this method in cases of inversion.

I know innumerable such cases [he writes] in which the homosexuality has completely faded out and disappeared, the individual having been from all points of view, for some considerable time, submitted to the conditions imposed upon him by the association treatment. I have been able to keep in touch with some of these homosexuals for ten or twenty years, and even almost thirty years after the disappearance of their homosexuality, and I have no doubt at all that they have remained normal.³

Psycho-analysis has also been applied to the treatment of homosexuality. Freud is as reserved on the therapeutic as on the explanatory value of his method.

The removal of genital inversion [he writes] is in my experience never an easy matter. On the contrary, I have found success possible only under specially favourable circumstances, and even then the success essentially consisted in being able to open the way to the opposite sex, which had been till then barred, thus restoring to them full bisexual functions. After that it lay with themselves to choose whether they wished to abandon the other way that is banned by society, and in individual cases they have done so. One must remember that normal sexuality also depends upon a restriction in the choice of object; in general, to undertake to convert a fully developed homosexual into a heterosexual is not much more promising than to do the reverse, only that for good practical reasons the latter is never attempted. In actual numbers the successes achieved by psychoanalytical treatment of the various forms of

¹ Krafft Ebing and Moll, P. S., pp. 754-55; Havelock Ellis, P. S., pp. 212-13.

² Krafft Ebing and Moll, P. S., pp. 763-78.

³ *Idem.*, P. S., p. 781.

homosexuality, which, to be sure, are manifold, are not very striking. As a rule the homosexual is not able to give up the object of his pleasure, and one cannot convince him that if he changed to the other object he would find again the pleasure he has renounced.¹

These lines were written in 1920. Since their publication, various case-histories which have appeared in the psycho-analytical journals allow us to think that Freud has been too modest. For our part, we are very much afraid that the quantitative schema of bisexuality may have weighed heavily upon Freud's thought. "Full bisexual functions" is a conception which seems to us rather weak. It is striking to find that, from the point of view of general biology, Goldschmidt is very little inclined to favour the concept of bisexuality.

It has sometimes been said [he writes] that the young embryos of the Vertebrates are hermaphrodite or asexual. This is an utterly erroneous viewpoint. The embryo is male or female by its genetic constitution (XX or XY). But the embryonic morphogenesis provides first the material necessary for the construction of the genital passages; the genetic sex will be imposed later, involving the differentiation of Wolff's canal or Müller's canal.²

Whatever we may think of the theoretical discussions of the concept of bisexuality, it is indisputable that a therapeutic method of psycho-analytical inspiration may lead to a very real success in the treatment of inversion. Here is a typical example.³

The patient Girolamo, an Italian labourer aged 32, came to the out-patients' department of Professor Claude's clinic "to have his impotence treated" at the beginning of the year 1933. He was examined once by Dr. Adrian Borel. He returned at the beginning of June, and was handed over by Dr. Borel to Dr. Breuer for some kind of analytical psychotherapy. In answer to Miss Breuer's questions, he said that all his attempts at intercourse with women had been fruitless. He felt no sensation at all in touching or caressing women. On the contrary, when wrestling with his men friends, he had erections—as also when seeing them naked at the shower-baths. He dreamt that he was wrestling with naked men, or that a naked man was lying beside him. He used to wake up from these dreams having an emission. At about the age of 17 he had had an erection when a dog licked his thighs. He had only learnt of the existence of homosexuals four years previously. Until then, he had imagined himself possessed of an evil spirit through witchcraft. Since his

¹ H. W., pp. 206-7.

² Goldschmidt, D. S. I., p. 137.

³ Here I must acknowledge my full debt of gratitude to Mlle. Breuer, who has so kindly communicated to me the following excellent case-history. (D.)

friends told him of the existence of homosexuals, and that their meeting-ground was near the public urinals, he had had erections when passing such places. He said that he had habitually practised mutual masturbation with his companions until the age of 17 or 18, but asserted that he no longer masturbated. He complained that after meals he became swollen and flushed, and had headaches and feelings of heaviness and choking. This patient exhibits the characteristic signs of homosexuality as we described them above. Firstly, he feels an erotic attraction towards individuals of the same sex, as is proved by his psychogenic erections at the sight of male nudity, and confirmed by his wet dreams of naked men. Secondly, he feels no erotic attraction towards women. All his attempts at intercourse have been motivated by the desire to be like other people. In his youth he wished successfully to achieve coitus "so as to be a grown-up young man." He would have liked to marry in order to have children. Thirdly, Mlle. Breuer thinks that the reason why this patient did not confess positive distaste for women at the beginning of treatment was in order not to offend her, for towards the end he said: "Now the distaste has gone." This is therefore really a case of homosexuality in the strict sense, and not of bisexuality. Mlle. Breuer was even afraid she might be dealing with a case of innate inversion. Girolamo, indeed, felt no special attraction towards young prepubescents. When, in order to save money, he used to share a bed with friends of his own age, he had erections. This had even occurred with his brother-in-law, who was older than he was.

Before coming to the clinic, Girolamo had sought help in various quarters. He had complained of his impotence to a priest in confession, and had simply been told: "So much the better! Then you won't commit sin." Having seen in a newspaper the advertisement of an Italian ecclesiastic—or pretended ecclesiastic—Girolamo had written to him. He had received in reply a book which was merely an incoherent jumble of quotations and a "fortifying medicine." This having achieved no result, Girolamo applied to a medical institute. There he had been treated by electricity, had been made to take medicine, and had in the end been sent to a woman, who, he had been told, "did it out of pure devotion," and who was in fact simply a prostitute. It had been an utter failure. Having paid 2,000 francs to the medical institute and 200 to his "charitable assistant," Girolamo was as impotent as ever. This last failure deserves special attention. If Girolamo could have been cured by suggestion, the electric treatment and medicines should have been enough to convey the suggestive influence. Robbed and discouraged, Girolamo decided to see what the clinic could do.

Girolamo's history, as it was told in more or less disconnected fragments to Mlle. Breuer, may be summarized as follows: At the age of twenty-two months he fell a victim to coxalgia. He remembered that his parents took him to hospital and left him alone there. He cried a good deal. He was put into plaster. Two months later, his parents came to fetch him. He stayed in plaster for two years. When he was taken out, his father made him some crutches. He was sitting quite near the carpenter's bench while his father, in tears, was preparing the crutches. This scene made a great impression on him. When he reached the age of eight, he was able to give up his crutches, but he still limped in one leg. This disability was an endless source of humiliation to him. Again and again he heard his uncles saying that he would never be *potente*. Thus he soon became ashamed of his weakness. When the mistress at his dame's school punished him he complained to his mother, who went to the teacher and reproached her for having struck a crippled child. Thereafter exceptions were made for him. Girolamo was ashamed at this, and regretted having complained.

He was the eldest of a family of nine children. His father, who was himself the eldest in the family, lived like a patriarch at the head of a real tribe of about thirty-five people. Girolamo's mother was, as one may imagine, completely taken up with the cares of such a household. Thus it was the little cripple's father who looked after him most. He was a farm-labourer, an occupation which gave him long winter holidays. He adored his eldest son, used to hug him to keep him warm, and sleep with him. At about the age of seven, Girolamo, who was sleeping with his father, accidentally touched his father's penis with his hand. This gave him an erection. He even said, in his somewhat incomprehensible French, that he had had an ejaculation, which is completely improbable. The fact remains that this incident aroused in Girolamo a violent guilt-sense. His grandfather was an old drunkard. Some time after the episode just described, Girolamo found his grandfather asleep in the barn with his trousers open. He looked at his penis, which seemed to him enormous, and he thought his own was too small. He trembled with emotion, and stood rooted to the spot. It must be noted, on the contrary, that when (at about the age of seven or eight) he happened to see his mother asleep naked, he thought that she looked rather unattractive, and did not take much interest in the sight.

This period of Girolamo's life was marked by other important events. A little cousin, who lived in the same house, died. Girolamo saw him in his coffin, took fright, and from that moment started night terrors which lasted until about the age of thirteen or fourteen.

Every day he dreaded the return of his fear, and tried to reassure himself by superstitious practices: "If I meet such-and-such a person before reaching that tree, such-and-such a thing will happen." This superstitious mental attitude persisted until he came for treatment. But Girolamo's emotional development was primarily influenced by his affection for his little sister, three years younger than himself. At the age of seven or eight he used to play with her a good deal, dressing her, and dressing himself up as a little girl. Because of his physical weakness, he preferred the company and the games of little girls, as being less noisy than those of boys. Girolamo's affection for his sister had continued throughout later life. When she had reached the age of sixteen, she went to town to work. Girolamo was then nineteen. Neighbours said at the time that the girl had gone off because she was with child by her brother. Girolamo was distraught, and brought an action against them. Later this sister married, but her married life was unhappy. Girolamo was greatly concerned at her misfortunes.

Girolamo's first attempt at heterosexual intercourse took place at the age of sixteen. He was impelled to it by the desire to "do as the others did." His failure greatly discouraged him.

Dr. Breuer began the treatment of this patient at the beginning of June, 1933, and ended it in mid-December of the same year. During the first fortnight, Girolamo came every day. Then the sessions only took place twice a week. They were interrupted for two months during the holidays, and later resumed at the rate of one a week. From the start, Girolamo manifested an excellent transference, and showed the greatest confidence in Mlle. Breuer. Although an ignorant worker, he very quickly understood the nature of the unconscious. Here is a dream from the early stages of treatment which clearly illustrates the struggle between the heterosexual impulse seeking for expression, and the emasculating inhibition. "A girl is running in a field, pursued by a dog, which catches her up, throws her down and has sexual intercourse with her. When the dog gets up, it loses its penis, which falls to the ground." The girl was an acquaintance of Girolamo, who had reflected that she would go with any man. The dog was that of the boarding-house in which he took his meals. It reminded him of another dog, whose penis someone had cut off for fun. When he saw the dog, Girolamo had said to himself, "He's like me." He added "The dog was really me."

Mlle. Breuer made Girolamo understand that the attention he had received from his father, instead of from his mother (as was more usually the case), had determined in him an original orientation towards men (inverted, or negative Œdipus complex). His physical

weakness and the scornful references to his impotence had inspired him with a fear of masculinity. Thus prepared, he had quite naturally identified himself with his sister. At the time of his first attempt at heterosexual intercourse, he was perhaps not mature, and that failure had completed the process. She laid much emphasis on the fact that he was not a worthless man, that he knew how to get on, and had mastered several trades. That was quite as good as being a womanizer. At the end of a month's treatment, the other guests at the boarding-house where he took his meals asked him: "What is the matter with you? You're quite changed." From the beginning of treatment, Mlle. Breuer had forbidden Girolamo to continue his experiments with women. The patient's character grew gradually stronger; he answered when spoken to; he was no longer afraid to speak to women; he enjoyed some little social successes, and got on well with his work. The transference then became extremely active; Girolamo wanted to become rich, and told Mlle. Breuer that once cured, he "would come back and visit her as a friend." Here is a dream from this period when the transference was so strongly in evidence. "Girolamo is at home in Italy; they sit down to a meal. Mlle. Breuer is there." There was something else, about which the patient gave no details. Mlle. Breuer supposed that the transference must have manifested itself in dream-images of an erotic character which the patient did not venture to confess.

One day Girolamo said that he felt capable of having sexual intercourse. Mlle. Breuer told him that he might try, so long as he would not be upset in case of failure. Girolamo went to a brothel, where he said that he was exhausted from excessive intercourse, and wished to take his time; he would pay an inclusive fee for the whole night. They charged him 75 francs. He achieved coitus three times, and later told Mlle. Breuer that he had then refrained so as not to exhaust the woman. He went back to the same brothel two or three times. Then he went back to his own country, where he made the acquaintance of a girl whom he liked; she became his mistress and later his wife.

In February 1935, Girolamo returned for another consultation. He complained of distension after meals, and a nervous condition due to troubles connected with his work. His homosexuality still remained cured. He told Mlle. Breuer that he no longer had homosexual dreams, nor erections in relation to men. He had once been impotent with his wife at a moment of great exhaustion, but three days later he had once again successfully achieved coitus. Here is a dream of this period. "He had to get up; a girl said to him: 'Stay five minutes longer,' and lay on top of him." At that moment his

alarm-clock rang. The girl in Girolamo's dream was an acquaintance who worked with him.

Mlle. Breuer believes that heterosexual attraction is still somewhat imperfect in Girolamo's case. He seems to find in his sexual relations a sop to his self-esteem rather than complete erotic satisfaction. He wants a child. Unfortunately, the marriage has so far been barren. Mlle. Breuer thinks that happy fatherhood would finally consolidate Girolamo's cure.

I have deliberately quoted this case of cure of a homosexual by psychological treatment of an analytical type at full length, for some famous writers profess, so far as the therapeutics of homosexuality is concerned, a defeatism which entails fatal practical consequences. It is understandable that Freud, from the very fact that he is the inventor of psycho-analysis, should have expressed an excessively modest view of the possibilities of his method. But we must react against the mythology which has been built up around homosexuality by a certain number of writers. That literary critics should have been duped by this mirage—well and good; but it is much more serious that physicians should have lent it the support of their scientific authority. Hirschfeld is the best known representative of the medical school which regards homosexuality as a closed world. Moll's severe criticisms of him make interesting reading.¹ Havelock Ellis has also allowed himself to be caught in the backwash of the defeatist wave. Quoting one of his patients who considered that normal sexual relations were for him merely an expensive and dangerous form of masturbation, Havelock Ellis adds: "But that is the best that psychotherapeutics can generally hope to achieve."² Statements of this kind are more than theoretical errors. They constitute a formidable anti-therapeutic suggestion. If patients and physicians are convinced in advance that inversion is incurable, no treatment will be undertaken, or if it is, it will be in such an atmosphere of scepticism that the result will inevitably be negative. This vicious circle must be broken. It cannot be too often repeated that there are indisputable cases of cure of inversion. There is no proof, let us also repeat, of the existence of a homosexuality by innate paradifferentiation. Obviously we cannot prove that there are not incurable cases. But since, supposing that it exists, this incurability cannot be known in advance, the necessary conclusion is that treatment must be undertaken in all cases of inversion.

In the foregoing pages, we have not dealt much with homosexuality in women, the investigation of which is backward in com-

¹ Krafft Ebing and Moll, P. S., p. 729, 731-2, 781, 846-8.

² Havelock Ellis, P. S., p. 214.

parison with that of homosexuality in men. Personally I have never had the opportunity of studying any cases of *essential* female homosexuality; in all the cases which I have seen, the tendencies to inversion have been merely a single symptom in the general neurotic picture. Material of this kind is evidently unsuitable for critical review. Moreover, it is not extensive enough to allow of any reasonably stable generalization. Thus the observations I have been able to make are limited in their bearing. Two points struck me particularly: Firstly, I have found more or less marked tendencies to inversion in all the neurotic women I have been able to examine. I am disposed to interpret these tendencies in terms of the concept of "undifferentiated sexuality" rather than of "bisexuality," but the fact none the less remains. Secondly, it has seemed to me, in the cases in which I have been able to form an opinion, that I was dealing with an anomaly of aim, as much as, and even more than, with one of object. One such patient used to say that, "it would be much nicer if she had something with which to penetrate." Another would have liked to have had firm breasts in order to thrust them into her partner. These two examples are particularly significant, and illustrate the importance of penis-envy and of the revolt against femininity as the basis of homosexual tendencies in women. The study of female homosexuality leads quite naturally to that of anomalies of aim.

(iii) *Anomalies of Aim*

We have already pointed out that there is a real, but relative difference between the sexopathies of object and those of aim. The distinction is not absolute, for the variation of object inevitably entails a certain variation of aim. Conversely, a different act is unavoidably directed towards a different exact object. Yet it does not seem possible fully to bridge the gulf between the two types of sexopathy. The anomalies of object are primarily paradifferentiations; their characteristics are dominantly psychic. The anomalies of aim, on the contrary, are rather discordant integrations of the organism's response, which authorizes us to lay principal emphasis on their motor and neurological aspects. If this contrast were pressed home, one would be tempted to establish a comparison between the sexopathies of aim and Kretschmer's "short-circuit actions."¹ From this point of view, one would say that in sadism there is a pathological exaggeration of the normal male component of aggression, and that this intensification invests that component with a power of producing ejaculation which should normally belong to the movements of fric-

¹ Kretschmer, T. M. P., pp. 186-9.

tion following on intromission. We are therefore faced with a "syncopated act," a sort of "neuromotor short-circuit."¹ This conception has no more, perhaps, than a metaphorical value, but it is nevertheless useful for fixing one's ideas. It may be objected that it squares badly with certain cases in which the representation of the abnormal act is exciting, whereas its accomplishment is not so at all, and leaves the patient very much disappointed. It is clear that in such cases the anomaly of aim has a more or less exclusively psychic value.

In any case, it seems to us impossible to deny that so far as innateness is concerned, the anomalies of object (except homosexuality) and those of aim are very differently situated. It is inconceivable that Louis XV heels or parrots should possess an innate capacity to stimulate erection in a given subject, whereas we may quite well admit that the aggressive impulse should be innately capable of stimulating, not only erection, but also ejaculation *in an individual with strong hereditary stigmata*. We see that, in anomalies of aim just as much as in those of object, the doctrine of the "polymorphous pervertibility" of the child must be substituted for that of "polymorphous perversion." In no case is the *normal* development *positively* predetermined towards any anomaly whatever. When adult sadism is in the strict line of extension of infantile sadism, it must be recognized that this innate sadism has been introduced at some point or other in the line by some material action which vitiates the germ-plasma. It is neither more nor less than the principle of causality that is involved here. Since all men are not innate sadists, those who are so must owe their condition to the intervention of some supplementary cause.

Diseases [writes Professor Roger] are always due to external agents. To invoke an internal cause is once more to submit to the influence of the belief in vital spontaneity. There is even no exception for disorders transmitted by heredity or by innateness. For the parents' disease has been caused by an external agent, and what we observe in their descendants is no more than the continuation of the disorders whose cause must, as always, be placed outside the organism.²

But although the sexopathies of aim may be innate, we have no right to assert that they are necessarily so. It is perfectly conceivable that sadism, for instance, may be acquired during the infantile period of non-integration by means of a fixatory mechanism more

¹ Cf. T. C. S., pp. 70-1.

² Bouchard and Roger, *Nouveau traité de pathologie générale*, p. 29.

or less similar to a conditioned reflex. The result of these remarks is that the ætiological hypotheses which we may legitimately put forward to explain the anomalies of aim are different from those which we have suggested for the anomalies of object. Here the governing element has very little unity; it is not necessarily of psychic and qualitative character, as in the sexopathies of object. Nor can we make a clear contrast between the negative and the positive aspects of the disorder. We are thus led to admit that the ætiology of the sexopathies of aim may be either somatic and innate, or somatic and acquired, or psychic and acquired. It would, of course, be interesting to possess criteria enabling us to establish the differential diagnosis of each of these cases. Our ætiological hypothesis seems to be in need of some support. Unfortunately sexology is not yet far enough advanced for this purpose. The analyses of the most highly reputed authors are still very imprecise. They scarcely distinguish lack of differentiation from paradiifferentiation, lack of integration from discordant integration.

The principal anomalies of aim are sadism, masochism, voyeurism and exhibitionism. No useful purpose would be served by publishing a summary here of all the material on these sexopathies to be found in the standard works on the subject. Our own personal observations have dealt only with sadism and masochism. Unfortunately some are not complete, and others were conducted at a time when the foregoing ætiological hypotheses had not yet taken shape in our minds. In psychopathology—as everywhere else, alas!—one usually finds only what one is looking for, and one passes by facts and relations of major importance to which one's attention has not been drawn. We shall therefore simply give a few details of a case of sado-masochism.

The patient Lucien, aged twenty-seven, had had two depressive attacks, the exact diagnosis of which would lead to a controversy completely outside the scope of the present chapter. We shall therefore only concern ourselves with the patient's sexual life. He said that he had practised masturbation since about the age of fourteen, lying on his stomach and evoking sadistic images, of which the following are some specimens: travellers tortured by Chinese or by Indians; woman hanging upside down; woman caught in cog-wheels; woman crucified with needles sticking into her breasts; the death of Joan of Arc; the martyrdom of St. Sebastian, with masochistic identification; the flagellation of Christ, etc. So as not to ascribe to the religious images a guilt-sense which they did not arouse, we must point out that Lucien was brought up without any religious beliefs. At about the age of twenty-two or twenty-three, he attempted inter-

course with prostitutes, but had no erection. He married at the age of twenty-five. He has always used a contraceptive in his conjugal relations, and only achieves ejaculation by imagining scenes of torture, captivity, etc.¹

Besides being much too short, my investigations of the origins of this sadism did not lead me very far. The first ejaculation took place at about the age of fourteen. Lucien was lying "sprawled across his bed" and, as usual, conjuring up in his imagination the scenes that delighted him. That day he was imagining that he was the king of a people to whom he was so devoted as to suffer martyrdom for them. Suddenly he felt a pleasant sensation. He did not realize what had happened, found that his shirt was wet, and thought it was urine.

This fantasy is genuinely masochist. Moreover, it is traditional to assert the constant link between sadism and masochism. It is certain that before this first ejaculation the day-dreams to which the patient was addicted had a sexual origin of which he was unaware. But I was unable to find sufficient data to incline me to accept one ætiological hypothesis rather than another.

It also seems very difficult, in the sexopathies of aim, to define the part of the innate and of the acquired elements. The sexopathies of object are much more intelligible. If the reader refers to the case-history of Girolamo, he will feel that he understands why this patient became homosexual. Even if one possesses the detailed history of a sado-masochist, one does not feel that one understands it. The fact is that in the sexopathies of aim, one seems to be dealing primarily with a quantitative anomaly, and our present methods do not enable us to measure that quantity. Genital pleasure is normally found in association with aggressiveness in men. At what point does normal male aggressiveness become sadism? We do not know. It is valueless to say that sadism begins either when representations of actual cruelty are capable of provoking erection, or when representations of aggressiveness not going so far as cruelty are capable of provoking

¹ This state of affairs raises the problem (which has been far too widely neglected by the sexologists) of the relations between contraceptive practices and the sexopathies. It is clear that in the present case sadism existed long before any use of contraceptives, but it is legitimate to inquire whether the fact that the sheath more or less hinders the normal accomplishment of the friction movements which ordinarily produce ejaculation, does not contribute to keeping up the sexopathy. Since the normal stimulus producing ejaculation is absent, the patient has a further motive for recourse to an artificial release-mechanism, in the shape of pre-existing sadistic images, in order to reach the degree of tension sufficient to provoke ejaculation and orgasm. The sexopathy would thus be kept up by the contraceptive practice. The counter-verification of normal coitus never having been tried, it is impossible to estimate the exact influence of the sheath. The contributory role of the contraceptive practice in the persistence of the sexopathy is therefore still only a hypothesis.

ejaculation, for these statements do not go beyond the purely semeiological level, and do not tell us why certain situations develop in certain individuals. The more one reflects on this problem, the more one is tempted to believe that present-day research ends in an impasse, and that to escape from it we should need nothing less than a new method of investigation.

Freud has frequently stressed this importance of the quantitative factor.

The differences between the normal and the abnormal [he writes] can only lie in the relative intensity of the various constituent elements of the sexual tendency, and in the role which they are called upon to play in the course of their development.¹

This formula makes the mistake of not distinguishing the anomalies of object from those of aim. It is frankly inadequate in the former case, in which it only applies to the negative and somatogenic factor, whereas the positive and psychogenic factor is clearly irreducible to the order of quantity. In the latter case, on the contrary, it seems to point in a direction in which the least advance would be invaluable. Unfortunately we do not know how to set about making that advance.

Our investigation of the sexopathies must end with their treatment. We have already examined the question of the treatment of homosexuality. Our remarks in that connection may be applied *mutatis mutandis* to the other anomalies. We shall therefore restrict ourselves to formulating some general principles.

The defeatism of traditional psychiatry so far as the treatment of the sexopathies is concerned is a grave error from the theoretical, a serious danger from the practical point of view. There are indisputable instances of cure of all the types of sexopathy, both by the synthetic² and by the psycho-analytical process. It is a regrettable fact that the psychotherapy of sexual anomalies is more or less unknown in France, although it yields substantial results abroad. And this does not apply only to psycho-analysis. Let us, for example, compare Rogues de Fursac and Moll. The French psychiatrist asserts that heterosexual intercourse does not constitute a therapeutic method for the sexopathies. That is very true, and everyone is agreed upon it. But having acknowledged this, the idea does not even enter his head that one may undertake a form of psychological treatment capable of modifying the orientation of the instinct.

¹ T. C. S. (not in English version).

² Krafft Ebing and Moll, P. S., pp. 167-8, sadism; pp. 171-2, sadism, cure has lasted for ten years; pp. 185-8, homosexual sadism and mild feticism; pp. 774-5, masochism and feticism.

In short [he writes] there seems to be no cure for the true homosexual, and it is useless to try to make him normal. All that he can do—all that he should do, and will do, if he wishes to live a moral life—is to remain continent. The invert, as Féré has very justly observed, must pursue the ideal of chastity and not of normality.¹ I shall say as much of all the other sexual psychopaths—at least, of almost all. I shall say as much of fetichists, sadists, masochists, and perverts of every description. Heterosexual intercourse never causes the disappearance of perversion, except in the case of young individuals whose sexual appetite is still, as it were, in course of orientation, and very rarely in other cases.²

Moll's attitude is absolutely opposed to this therapeutic nihilism. The German psychiatrist also admits that to prescribe coitus for sexopaths is meaningless from the therapeutic point of view.³ But having admitted this, he works out a detailed technique of the re-adaptation of the instinct to the normal object and aims.⁴ Above all, he publishes cases of cure which have been maintained for many years. This is clearly the vital point, for a therapeutic method is judged by its results. We have had frequent occasion to remind our readers of the logical principle that negative instances prove nothing. The incurability of the sexopathies, as asserted by Rogues de Fursac, must therefore be utterly rejected.

Let us also recall two conclusions of general value which we have had occasion to assert for the various sexopathies considered separately. Even if certain, innateness need not necessarily imply incurability. Moreover, in the present state of our knowledge, there exists no certain sign of the innateness of a paradifferentiation or of a discordant integration.

We have even maintained that, except where homosexuality is concerned, the hypothesis of an innate paradifferentiation did not seem conceivable.

The encouraging results obtained by psycho-analysis in the treatment of the sexopathies, reinforcing those achieved earlier by the synthetic method, illustrate the fundamental soundness of this statement of Moll, which openly challenges the defeatist tradition: "There is hardly any field of psychotherapy which offers such satisfaction as the treatment of the sexual perversions in the time required."⁵

¹ Féré, *L'instinct sexuel*, second edition, p. 285.

² Rogues de Fursac, *Manuel de Psychiatrie*, sixth edition, p. 671.

³ Krafft Ebing and Moll, P. S., pp. 756-8. ⁴ *Idem.*, P. S., pp. 763-78.

⁵ *Idem.*, P. S., p. 772.

IV. Freud's Sexological Speculations

We have not examined narcissism in the foregoing section, although it might have seemed appropriate for the study of this disorder to have found a place among the other sexopathies. This decision was determined by the fact that narcissism holds a special place in Freud's system. The elaboration of this concept has indeed constituted a turning-point in the development of the Freudian doctrine of sexuality. Freud began by pointing out that the sexual was not identical with the genital. The sexual is originally the genital, but it is also that which possesses the characteristic effect of releasing genital excitement. The domain of the sexual therefore comprises the pleasurable sensations of the erogenous zones, the starting-point of the remote reflex erections, and the amorous emotions, the starting-point of the psychogenic erections. So far we are on firm ground. The existence of amorous emotions is beyond all dispute, and so is their essential causal relation with the stimulation of the genital zone. We have contrived to convince ourselves of this by examining the relations between the instincts of contraction and detumescence. The doctrine of the erogenous zones cannot show the same weight of evidence. Although it is absolutely certain that there are cases in which stimulation of the anal zone, for example, produces stimulation of the genital zone by a mechanism which seems to possess all the stability of an innate reflex, and cannot be reduced to a psychogenic and acquired link, the fact remains that we may still inquire whether we are not dealing with an individual variation. We have seen that sexologists such as Havelock Ellis and Higier, who are independent of psycho-analysis, admitted the existence of true erogenous zones, that is to say, regarded the aptitude to remote reflex erections as an integral part of the specific type. Whether this solution be accepted or rejected, the problem is one of pure physiology, amenable to the ordinary rules of method of that science, which will be finally settled some day. That is not at all the case with narcissism. The introduction of this concept has led Freud utterly to recast his sexual theory, and has finally led him to the speculations concerning the life and death instincts. It is by the doctrine of narcissism that Freud's science of sexology has been transmuted into a philosophy of sexuality. That is why we have thought it right to treat narcissism separately.

Before discussing the speculative consequences which Freud has drawn from narcissism, we have two stages to traverse. We must first study the narcissistic sexopathy in itself, and secondly see

whether we can follow Freud in recognizing the existence of a narcissistic stage in the normal evolution of the sexual instinct.

Narcissism must not be confused with auto-erotism, in the Freudian meaning of the expression. Havelock Ellis, who was the first to speak of auto-erotism, used it to mean "all the spontaneous manifestations of the sexual impulse in the absence of a definite outer object to evoke them, erotic dreams in sleep being the type of auto-erotic activity."¹ The essential point, according to Havelock Ellis, was the spontaneity, the absence of external stimulus. The domain of auto-erotism was thus found to comprise: erotic day-dreams, erotic dreams during sleep, masturbation, and finally narcissism, or sexual self-love.² Freud modified the meaning of the expression "auto-erotism." The characteristic of spontaneity no longer served to define it. In Freud's view, the characteristic of auto-erotic activity is the fact that the individual procures gratification from his own body.³ In the Freudian sense, therefore, auto-erotism is limited to masturbation or to mechanical stimulation of the erogenous zones by the individual himself. We observe that in auto-erotism we are dealing with sexual sensations, not emotions. The contrast between narcissism and auto-erotism is analogous to that between the psychic and the sensory. The narcissist is in love with himself, in the strict sense. His instinct of sexual contraction is directed towards himself instead of towards an external object. Masturbation is not necessarily narcissistic, and narcissism does not necessarily end in masturbation.

We shall illustrate these theoretical remarks by two case-histories, one observed by Rohleder, and one by ourselves.

Rohleder's case is especially remarkable, for narcissism constituted the only form of sexual gratification of the patient X, aged twenty-six, who could remember no heterosexual or homosexual phenomenon before the age of thirteen, when he began to masturbate once or twice a week. He had never practised mutual masturbation.

From the age of 14 [he said] there awoke within me a self-esteem, a powerful self-love; I loved myself terribly, and used to embrace myself, even going so far as to stand before a mirror and kiss my own image. This gave me erections; at the same time my supreme delight was to stand naked before a long mirror and gaze at my own penis, which sometimes excited me so much that I ejaculated before I had even touched it.⁴

¹ Havelock Ellis, *Studies in the Psychology of Sex*, vol. vii, "Eonism," cap. vi, "Narcissism," p. 362.

² Krafft Ebing and Moll, P. S., pp. 616-19.

³ T. C. S., p. 43.

⁴ Krafft Ebing and Moll, P. S., p. 619.

He had tried to have intercourse with women, but did not succeed in arousing the least heterosexual excitement. Nor had he ever experienced homosexual excitement.

In his dreams, he sees himself naked in a large reception-room before a long mirror, or in a large room with the walls entirely covered in mirrors, i.e. "where my naked form is reflected from all sides. I then begin to make amorous glances at myself, twirl my moustache and embrace myself, whereupon I have erections and ejaculations." Sometimes too he dreams that he is going to bathe, that he is sitting beside the sea, or by a stream, and sees himself reflected. Then he feels a desire to embrace the water, and the various parts of his body reflected in it. Gradually he becomes coupled with himself: "I press my penis against the penis reflected in the mirror, or between my thighs, and then I experience the height of voluptuous pleasure; the only thing which repels me is the cold surface of the mirror. But what produces an even greater effect is to rub my penis against my thigh; then, largely owing to the warmth of the thigh, I feel a tickling and itching sensation in the urethra, and immediately afterwards ejaculation takes place." He is not sorry never to have had sexual intercourse with anyone else; he is absolutely self-sufficient. "Involuntarily, the idea occurs to me that my reflection in the mirror is a second live ego, that I exist in the form of two persons. This second ego, which in my imagination always seems to me to be physical, is the being whom I love passionately. This image, my own ego, is also what I see in my mirror-dreams."¹

My personally-observed case-history concerns the patient called Irene, whom I have already mentioned in connection with the castration-complex. This young woman had very strong masochistic tendencies. She was capable of experiencing pleasure in coitus, but was primarily a habitual masturbator. This masturbation was partially explained by the lack of heterosexual relations which the patient had often to undergo, yet it seemed that Irene found more intense pleasure in masturbation than in coitus. This solitary gratification was obtained both by mental images and by manual friction. The stimulating imagery was sometimes normal, sometimes a narcissistic fantasy in three stages. At the first stage, Irene said to herself, "I am going to love myself"; at the second stage, "I am going to possess myself"; at the third stage, "I am going to fertilize myself." The pleasure increased at each stage, but Irene rarely reached the third stage.

The essential difference between this case and Rohleder's is that Irene is not exclusively narcissistic. Nor am I aware that she uses a

¹ Krafft Ebing and Moll, P. S., p. 620.

mirror in masturbation. None of her narcissistic dreams that I have had the opportunity of analysing have ever involved mirrors. On the contrary, she has had a very clear dream of her own double. It is a well-known fact, as Rank deserves the credit for having pointed out, that the theme of one's double is closely linked to that of mirrors. Irene was passing through a crisis, and was obsessed by the idea of suicide. One day she brought me the following dream: "In a kind of garden, at the bottom of a slope, there's some water. Someone with whom I am vaguely connected. A water-nymph in the water. He loved the water-nymph. He had given me a pretty revolver to shoot her with. The report was very nice; I enjoy shooting. I shoot. The pretty water-nymph changes into someone very ugly, looking rather like her, to die in her place. The one who took the water-nymph's place didn't know what to do." The morning after this dream, Irene bought a revolver. Here are some of the associations she gave me the same day.

Someone with whom I am vaguely connected. "A hunter, lying in wait for game. He loved the water-nymph. I thought her very beautiful. Sometimes it was my 'double,'" and a little later, "I am living through my dream again. I wish it were true, trying to kill someone, even if my water-nymph double were really me."

The general meaning of the dream is quite clear: it is a suicide-dream symbolized by the murder of the dreamer's double. I believe that here we are entitled to speak of symbolism in the strict Freudian sense. The murder of one's double is very often to be found in literature as a representation of suicide. We may say that this is a motif possessing a general human validity. It seems to me that its role in dreams has passed unnoticed by the psycho-analysts. I know of only one published instance of a dream of murder of one's double symbolizing suicide. This is, indeed, a remarkable instance, for which we are indebted to Rivers.¹ It was dreamt by an army doctor, suffering from anxiety-psycho-neurosis following emotional shocks sustained during the war. This patient, who was obsessed by the idea of suicide, dreamt that he was about to fire at a man who resembled himself. Rivers tells us that his patient, who was perfectly conscious of his suicidal ideas, yet had not the faintest notion of the meaning of his dream, even after having written it out and pondered over it for a long time.²

To return to Irene, it is interesting to stress the fact that her narcissism seems bound up with water-fantasies, which play a great part in the activities of her imagination, not only through the theme of reflections in water, but through envy of the penis as a urinary organ.

¹ Rivers, C. D., pp. 22-32.

² Rivers, C. D., pp. 28-9.

The reader will remember that as a girl she had tried to urinate like little boys. Havelock Ellis has called "undinism" what most psychoanalysts know as "urethral erotism" and most psychiatrists as "uro-lagnia."¹ The case of Irene, who experienced the sight of her double in the form of a water-nymph (*Undine*), shows that the term invented by Havelock Ellis is perfectly suited to one category of patients.

There are no grounds whatever for doubting that pathological narcissism is a fact. Rohleder's case-history alone would be sufficient to prove it. But are we entitled to go further and maintain, as Freud has done, that narcissism is a normal phase of sexual development? We have no hesitation in answering this question in the negative. Psycho-sexual development is no more a succession of sexopathies than physical growth is a series of morphological anomalies. We must repeat in connection with narcissism our previous remarks in connection with auto-erotism. In his evolutionary schema, Freud confuses—or tends to confuse—lack of differentiation with para-differentiation, lack of integration with discordant integration, the negative predisposition of the soil with the positive causality of the seed. We do not, therefore, admit that the individual passes through a narcissistic phase *de jure*. There is, on the contrary, no objection to the fact that a narcissistic phase *de facto* occurs with a frequency which has still to be determined from a strictly semeiological point of view. It is absolutely legitimate to admit that the psychosexual impulse passes through a stage in which the attractive object is not determinately the ego, nor determinately the non-ego. Before the process of normal differentiation has reached the exactness required for the non-ego to be the exclusive object, chance circumstances may bring it about that the ego becomes an accidental stimulus and tends to remain so. The schema which we have suggested for the genesis of the sexopathies of object (except homosexuality) is perfectly applicable to narcissism. Lack of differentiation due to a somatic stigma (innate or acquired), or even to simple normal infantilism, becomes a narcissistic paradiifferentiation through the intervention of a psychogenic and acquired factor.

Freud has paid no heed to these distinctions. He has simply postulated that narcissism is a normal phase through which all individuals pass. This conception of primary narcissism has led him to recast his sexual theory. Once one has admitted that the ego is the primitive reservoir of the libido, it does indeed become difficult to distinguish the group of sexual instincts from the group of ego-instincts. A strictly monist conception of instinct seems logically inevitable.² Freud has tried to distinguish narcissism from egoism,

¹ Havelock Ellis, *Studies in the Psychology of Sex*.

² I. L., p. 344.

but has suggested no exact criterion enabling us to tell one from the other. He has therefore been compelled (in order to maintain the dualism necessary to the concept of psychic conflict, the basis of all psycho-analytical explanations) to have recourse to the antithesis of the life- and death-instincts. This bipolarity, which may be compared to that of attraction and repulsion, calls for a certain amount of criticism.

So far as the life-instinct is concerned, this concept has obviously become so general that it has lost all essential association with sexuality. In the course of this work, we have continually stressed the fact that, whereas the sexual is not identical with the genital, at least it always stands towards it in some causal relation. Should this relation disappear, the concept of sexuality also disappears. When Freud tells us that in his system "sexuality is divorced from its too close connection with the genitals and is regarded as a more comprehensive bodily function, having pleasure as its goal and only secondarily coming to serve the ends of reproduction,"¹ he is making an assertion of which the least that can be said is that it has no foundation whatever in general biology. We must not lose sight of the fact that sexuality is a function found in the vast majority of living beings. It must therefore be given a general interpretation based upon the comparative study of all the animals and plants in which it is to be found, and not upon that of the sexopathies of the human species alone. The argument Freud brings forward to justify his point of view is that it enables us to understand infantile and abnormal sexuality. It is undeniable that a complete theory must explain these two groups of facts, and Freud deserves credit for having undertaken to furnish that explanation. We have tried, throughout this chapter, to show that his attempt has not yielded satisfactory results, and that these two groups of phenomena may be explained in a manner which respects the fundamental principle of the priority of the essential over the accidental. Freud seems to us to have been misled by a false conception of development which confuses lack of evolution with deviation. Certain criticisms do not bear attenuation. When Freud claims to define sexuality by the being's general tendency to pleasure, he falls into verbalism.

The death-instinct also seems to be a thoroughly confused concept. The tendency of a whole to its own destruction is conceivable in either of two ways. A first instance is that of a tendency of the parts, regarded simply as parts, to regain their independence in relation to the whole. The whole would be regarded as a unity of superimposition, which never becomes successfully imposed, as an extrin-

¹ A. S., p. 68.

sic super-order which sooner or later must fail. If the death-instinct meant nothing more, we should have no objection to raise against Freud. It is quite obvious that the being's chemical constituents exist just as well apart from as within him. But this would be a minimalist interpretation of Freud's thought. The second instance is that of a tendency of the whole, regarded simply as a whole, to self-destruction. Here we are dealing with something inconceivable. If the concept of a death-instinct has any semblance of intelligibility, it owes it entirely to the idea of the emancipation of the parts in relation to the whole. When this explanation is excluded, and the death-instinct conceived as a tendency of a whole, regarded simply as a whole, to its own destruction, we are confronted with the unintelligible pure and simple.

Finally, one might give the life- and death-instincts a perfectly acceptable transposition. It is legitimate to classify the human tendencies in two large groups—wish-tendencies and defence-tendencies. But this very commonplace classification bears only the most distant relation to Freud's thought.

V. Conclusions

The Freudian sexology has usually been judged with some feeling by Freud's supporters and opponents alike. In concluding this chapter, we should like to try to formulate as impartial an estimation of it as possible. We are all too well aware that perfect objectivity is an extreme ideal which the scientist never attains, but every attempt in this direction has a certain value.

It seems to us that the chief reason why the Freudian sexology is difficult to understand is its confusion of the scientific and of the philosophical point of view, or, if preferred, of experimental observations and theories constructed to explain them. Freud is an observer of genius, but his capacity for speculative construction is sometimes deficient. His sexology seems to us to contain, besides most valuable positive results, a serious doctrinal weakness.

One positive result that seems to us to have been gained through the researches of Freud and of his school, and also—as elementary justice requires us to recognize—through the criticisms which have been directed against those researches, is that infantile sexuality must be regarded as normal. Of course, this infantile sexuality is very different from that of the adult. It is essentially unintegrated and undifferentiated. When an integrated and differentiated sexuality appears in childhood, we have precocity of an adult type. This infantile sexuality may be exhibited either in the form of genital sensations

due to accidental local stimulation, or in the form of amorous emotions due to a psychic stimulation. Normally, amorous emotion is incapable of provoking genital reactions during childhood: psychogenic erection is a semi-adult phenomenon. If we admit the existence in all normal adults of remote reflex erections, we shall be led to classify the pleasurable stimulation of the erogenous zones, not followed by genital reaction, as normal infantile sexuality. Moreover, it is still possible, given the great differences of distribution exhibited by the erogenous zones in adults, to admit that remote reflex erection constitutes an innate variation, of merely individual validity. We must finally express important reserve concerning the normality of infantile sexuality: we consider the absence of specific sexual manifestations in childhood as normal as their presence. Blue eyes are as normal as brown. A child not exhibiting traceable sexual manifestations seems to us no less normal than a child exhibiting indisputable sexual manifestations.

A second positive result, in our view, arises from the work of the Freudian school. There is a genetic link between the sexopathies and infantile sexuality. The undifferentiated and unintegrated quality of infantile sexuality permits the accidental appearance of seemingly sexopathic manifestations. But the normal child does not exhibit true paradiifferentiation or really discordant integration. These apparently sexopathic manifestations may, by becoming consolidated through a mechanism of the type of the conditioned reflex, give place to true sexopathies.

In stating our conception of the conditioning of the sexopathies by infantile sexuality, we have already pointed out what we consider to be the flaw impairing the whole doctrinal edifice of Freudian sexology. Freud has not contrived to make the philosophical distinction between the accidental and the essential link. Hence his assertion of the polymorphous perversion of childhood, for which we must substitute that of its polymorphous pervertibility.

If we wished to plead the extenuating circumstances for the mistake made by the founder of psycho-analysis, we should say something like this. The whole of psycho-analysis is based upon the associative relation. Now this latter lies at the extreme furthest limit of causality. We have often used the word "cause" in speaking of the latent content in relation to the manifest content. We were entitled to do so, and do not repent of it. But if philosophical criticism sometimes drowns, the psycho-analyst's professional habit of dealing only with causalities of an accidental and associative type tends to make him lose sight of the vital differences contrasting association either with the specific legitimacy of the biological type, or with

logical implication. It therefore seems that Freud's mistake is readily understandable.

It is none the less true that the fundamental character of his system should have set him on his guard. The explanation of the failed act, the analysis of dreams, and the interpretation of symptoms are conceivable only through the reduction of disorder to order, of the accidental to the essential, of the abnormal to the normal. The basic schema of psycho-analysis amounts to Aristotle and Cournot's theory of chance: the accidental meeting of a number of essential causal series. In his sexology, on the contrary, Freud undertakes to reduce order to disorder, the essential to the accidental, the normal to the abnormal. We are therefore entitled to charge him, not only with a serious philosophical remissness, but with a definite disloyalty to the intuition upon which his whole work is based.

CHAPTER V

MORBID PSYCHIC CAUSALITY

However strong the opposition aroused by Freud's sexological ideas, it is none the less certain that the principal source of the antagonism to psycho-analysis, at least on the part of scientists, must be sought elsewhere. It is because he categorically asserts the ætiological role of psychic factors that Freud has been so fiercely opposed. In the course of this volume we have had several occasions of dealing with the problem of psychogenesis elsewhere. We must now examine it *in se*, and give an exact definition of our attitude to the concept of morbid psychic causality. Since we are not writing a treatise on psychiatry, but—a very different thing—a study of pathological psychology, we shall wholly disregard the purely nosographic controversies. It is in its philosophical aspect that the concept of psychogenesis is of interest. The following chapter will comprise three sections: (i) Psychic Disorder, (ii) The Privileged Ætiological Role of Sexuality, and (iii) The Therapeutics of Psychic Disorders.

I. Psychic Disorder

From a purely mathematical standpoint, disorder does not exist. Any spatial configuration may be more or less complicated, but it could not, strictly speaking, be disordered. Disorder involves both dynamism and pluralism. Disorder is, in fact, inconceivable except as a tendency not reaching its aim, or, if preferred, it is reducible to the concept of counteracted force, of thwarted activity. It therefore entails the concepts of *tendency*, *force*, and *activity*. That is to say that disorder is only conceivable in a *dynamist* philosophy. But this failure of a tendency, force, or activity requires explanation, an explanation which must, in the last analysis, be sought in the counter-acting agency of another tendency, force or activity. Disorder is therefore only conceivable in a *pluralist* dynamism. In this work we obviously cannot dream of undertaking the metaphysical justification of dynamism and pluralism. We need only observe that in biology, and above all in medicine, it is impossible to do without the concept of disorder. No doubt there are certain biologists and doctors who solemnly declare themselves statist and monists, but it

would be too easy to show that in their scientific activities they constantly make use of the concepts which they so pitilessly condemn in their philosophical sallies. Their active science contradicts their spoken philosophy.

Disorder may be localized at different degrees of depth. We shall distinguish disorder in effect, in action, and in being. Disorder in effect is the most superficial. It implies an exceptional resistance on the part of any given matter to the work of the agent attempting to modify it. This resistance itself, in so far as it is legitimate to qualify it as exceptional, requires the intervention of an antagonistic agent. To take a deliberately anthropomorphic example, clay will not answer readily to the modeller's hand if it has been baked too soon. Disorder in effect will be of no subsequent interest to us, for it plays no part in the specifically vital phenomena which form the object of our investigation. Disorder in action is at a deeper level. It is said to take place when the operation of the agent is deficient in itself, no longer only in the extrinsic term which it produces. This operative deficiency requires explanation, an explanation which may be sought in two different directions. Operative deficiency either arises from the antagonistic action of a force which forms part of the agent itself (as in strictly dynamic disorders), or is itself merely a consequence of a deficiency in the being of the agent—the last type of disorder which we shall examine in a moment. This operative deficiency following upon deficiency of being is to be found in lesional disorders. Let us return to the example of the modeller, and suppose that the clay that he uses is perfectly plastic. If the pottery he produces is a failure, the deficiency can no longer be ascribed to the material, but to the modeller's operation itself. The source of this operative deficiency may be sought in either of two directions. It may be that some pre-occupying anxiety is engrossing the attention of our potter and making him commit blunders—a strictly dynamic disorder. Or it may be that this is a neurological case, e.g. paralysis of the ulnar nerve caused by neuritis of syphilitic origin. Here the disorder of the operation is merely a consequence of disorder in the being. We are therefore logically led to examine this last type of disorder, the deepest of all. Since deficiency in being cannot appear without cause, it must necessarily be ascribed to the action of an external agent. In the instance we have just given, this will be the spirochæte.

In the three types of disorder we have investigated (disorder in the effect, in action, and in being) the explanatory schema is fundamentally the same. A possibility of disorder, proceeding from the very nature of material causality, becomes actual through the accidental intervention of an efficient cause. In itself, this efficient cause

only tends to produce its own specific effect, but it is found that this specific effect excludes another reality. The absence of the latter where it should have been present constitutes the disorder. We observe that the ultimate root of the disorder is that incompatibility of positive terms which so deeply scandalized Leibniz.

Illud tamen adhuc hominibus ignotum est, unde oriatur impossibilitas diversorum, seu qui fieri possit ut diversæ essentiæ invicem pugnent, cum omnes termini pure positivi videantur esse compatibles inter se.¹

The examples which we have given have been taken from the domain of life, owing to the particular end at which we are aiming in this chapter. The theory of disorder which we have just sketched might be applied to the inorganic world, but many people would be slow to realize it owing to the uncertainty surrounding the limits of individuality in the inorganic field. We have therefore avoided becoming involved in this controversy.

The important point to which we are particularly anxious to draw attention is that, in the last analysis, vital disorder is always exogenous. We have already advanced this thesis in the last chapter, but we must return to it. Its truth will become apparent from a comparison of the requirements of the principle of sufficient reason with the two types of disorder which may occur in the living creature—disorder in operation and in being. In itself, life only affords disorder a negative predetermination, a passive potentiality, a receptive field. The actualization and specification of disorder necessarily proceed from an external agent.

So far we have spoken of vital disorder, an expression as equally applicable to purely somatic as to strictly psychological disorders. Our special investigation of the latter compels us to adopt an attitude on a question of a metaphysical order—the irreducibility of the psychism. In Chapter I of this volume we have already rejected the rigidly monist systems which refuse to distinguish being from knowing. Whether existence is reduced to knowledge, as in idealism, or knowledge to existence, as in materialism, the absurdity is the same. Science is inconceivable unless the object is distinguished from the subject; it presupposes a minimum of dualist realism, as the whole work of such a man as Meyerson exists to show. Dualist realism im-

¹ "Man, however, is still unaware of the origin of incompatibility between various objects, or how it comes about that different essences may conflict, since all purely positive terms seem to be compatible with one another." *Die philosophischen Schriften* von G. W. Leibniz, herausgegeben von G. J. Gerhardt, vol. vii, p. 195. Quoted in Russell, *The Philosophy of Leibniz*, p. 20 (note).

plies certain consequences concerning the nature and ætiology of psychic disorders, which we shall try to expound.

Let us begin by attempting to grasp the full sharpness of the contrast between being and knowing. The simply existent being possesses no more than its own characteristics; the knowing subject enjoys the lofty privilege of possessing the characteristics of other beings without thereby losing his own. Given a rock and a walker. The rock has a certain form and a certain colour; the walker has another form and another colour. How is there to be established between the walker and the rock the communication necessary for the walker to see and know the rock? It would be ridiculous to imagine that the rock communicates to the walker its form and colour in their proper being—their *entitative* being, we may say. Walkers are only changed into rocks in Ovid's *Metamorphoses*. It would be scarcely less ridiculous to imagine that the rock has communicated to the walker reduced samples of its form and colour. Purely entitative assimilation, or physical resemblance, is infinitely distant from knowledge. A photograph may *resemble* the original as closely as one likes, but will never *know* it. But since a moment before the walker did not see the rock, and since he sees it now, we are compelled to admit that some change has taken place in him. The exact nature of this change is for us a profound mystery. It has nothing in common with entitative changes; by the latter a being becomes *other*, by the cognitive change, a being becomes, in a sense, *another's*. But this manner of becoming another's entails no destruction of the characteristics of the subject or object. In the entitative order, the rock remains a rock and the walker remains a walker. In the cognitive order, the walker sees the rock. Vision, regarded simply as such, is therefore an absolutely transcendent phenomenon which has no common measure with the material phenomena studied by physics, chemistry or physiology.

But here we encounter a double difficulty. Vision—or, more generally, sensation—is externally conditioned by the physical action of the object, internally by the physiological phenomena which take place in the corresponding sensory apparatus. How can we reconcile these two indisputable facts with the no less indisputable principle that the greater does not proceed from the less?

One cannot deny the passivity of the sense towards the object sensed, but one has no right to conclude from the fact that sensation implies a preliminary condition of passivity, that it is *pure* passivity. This leads to a certain palliation of the violent and intolerable paradox of the purely physical and material activity of the object producing in the subject an effect which is not only vital but psycho-

logical, and consequently superior to its cause. It is legitimate to conceive, in virtue of the principle of the reciprocal priority of causes, that whereas the content of the sensation, in so far as it is specifically such or such, is dependent upon the action of the object, the strictly psychological quality of sensation, which makes it a cognition and not a thing, is dependent upon the subject. It would be vain to pretend that this solution is very enlightening, and we unhesitatingly agree that it is painfully obscure. But if one rejects it, one falls into such genuine absurdities as materialism, idealism, or violation of the principle of causality.

Nor can one dispute the conditioning of sensation, regarded as a cognitive event, by physiological phenomena. But this conditioning may be understood in various ways. Nothing compels us to regard physiological phenomena as the strictly efficient causes of knowledge. Furthermore, the principle of sufficient reason compels us absolutely to reject any system which regards physiological realities as the strictly efficient causes of psychological realities. Must we therefore maintain that there is *strict* parallelism between the physiological and the psychological series? On the contrary, we hold that this conception, if closely pressed, is destructive of the very concept of knowledge. Let us return to our instance of the walker looking at a rock. He sees the form and colour of the rock *essentially as being entitatively distinct from himself*. If this is so, what conceivable parallelism can there be between physiological phenomena taking place in the walker, and the reference to the non-ego which is the very essence of knowledge? Here one must not let oneself be misled by the confusion between knowledge and material resemblance. Knowledge is not a copy, a photograph, a picture, a reproduction, or anything of that kind. All these comparisons only serve to confuse one's ideas. It is to them that parallelism owes much of its success. In order to obtain a better understanding of the fundamental error of parallelism, let us for a moment abandon sensation and consider memory. Memory is knowledge of the past, regarded essentially as such, i.e. as not in actual existence. How can a cerebral trace, which is, by definition, in actual existence, be conceivably paralleled with a past event, which, by definition, is not in actual existence? It will be objected that the memory is actual. We do not for a moment dispute it. But cognitive events can only be distinguished from one another by their contents. If one wishes to establish correspondence between the physiological and the psychological series, one will be compelled to make a parallel between the cerebral phenomena and the cognitive contents, which is obviously untenable where knowledge of the past is concerned. We do not dream of denying the possibility of estab-

lishing a correspondence between a limited brain-lesion, and a blindness in turn limited to a specific part of the visual field, but it is a far cry from this to the extended parallelist theory in the strict sense. As Jaspers has very rightly pointed out, in spite of the

close relation between the study of the physiological functions, even the highest functions of the cerebral cortex, and that of the psychic life, in spite of the undeniably close union between soul and body, we must not forget that the two kinds of investigation *never* meet in such a manner that one can speak of a correlation between *specific* psychic phenomena and *specific* physiological phenomena, or of a *parallelism* of the physiological and psychic phenomena. It is just as though an unknown continent were being explored from two sides, but the explorers never meet, being separated by a vast, impenetrable area. We never know more than the extremities of the causal concatenation between the soul and the body.¹

From the standpoint of pure scientific experience, we must recognize that parallelism is not demonstrable. From the philosophical standpoint, we believe it cannot be admitted, for it calls the reality of knowledge into question. Any theory of the relations between the psychic and the organic which undermines the objective character of knowing must be rejected as implicitly contradictory. That is why we refuse to subscribe to the parallelist doctrine. Conditioning of the psychological by the physiological undoubtedly takes place. This conditioning may be defined by purely positive methods. Its expression by the pretentious metaphor of parallelism must be abandoned finally and for ever.

Having thus outlined our philosophical position, we shall proceed to investigate the various theories which attempt to elucidate the concept of psychic illness. This discussion will enable us to complete the schema we have already sketched above of the various types of disorder—in effect, in operation, and in being. This schema has, indeed, a primarily philosophical character. It appears that the theories which explain psychic illnesses may be reduced to three—the epiphenomenalist theory, the theory of excitation, and the theory of functional release. Since in psycho-analysis the dream is the basic design upon which is modelled the explanation of the psychic disorders proper, we shall lay particular stress upon the interpretation of dreams given by the theories we are about to discuss.

The epiphenomenalist theory is sometimes stated in an extremely crude form. Some go so far as to write that the brain is the grind-

¹ Jaspers, P. C., p. 12. *Italicized in the text.*

stone of thought, or other expressions of this kind. It is obvious that such assertions run completely counter to the principle of sufficient reason. A material reality could not *produce*, in the strictly philosophical sense, a psychological reality. Moreover, the writers who apply the epiphenomenalist views to mental pathology often make the mistake of directly attributing a positive symptom, e.g. an hallucination or a delusion, to a destructive lesion. That matter should produce thought is itself inconceivable; what are we to say, therefore, of the theory which maintains that a hole in matter produces thought. Other writers seriously emend the epiphenomenalist paradox. They no longer maintain that matter is properly speaking the cause of psychic activity; they refuse to solve the question of causality; but, professing a strict parallelism, they hold that psychic lacunæ correspond to all organic lacunæ. This point of view is more advanced than the former in two important particulars: it no longer asserts either the strict production of the psychological by the material, nor the causation of the positive by the negative. The worst absurdities of epiphenomenalism are thus eliminated. Many clinicians who reject philosophical materialism resort to an interpretation of this kind. Their training as morbid anatomists leads them to lay almost exclusive emphasis on the role of the lesion. When combating a conception of this order, one must carefully avoid all injustice towards it. We are careful not to set the writers whose doctrine we have just summarized on the same footing as the epiphenomenalists. Yet we are at issue with them on two points. Firstly, their theory only explains negative symptoms, defect disorders, *hypo*-phenomena, we might call them; it does not explain positive symptoms, *para*-disorders. Yet the latter exist, and play a very important role. Their explanation must therefore be sought. We are thus inevitably brought to the metaphysical problem of psychological causation, which the theory attempted to elude. Secondly, we do not admit parallelism in the strict sense. We think it indispensable to distinguish between the assertion, which is absolutely amenable to scientific verification, that specific lesions entail the cessation of specific functions, and the strictly metaphysical assertion that the physiological and the psychological series may be paralleled. Following Hughlings Jackson, von Monakow and Mourgue have rightly insisted on the necessity of not confusing the localization of a lesion with that of a function, and to pay attention to the transient or permanent nature of the symptoms.¹

Freud has come up against the epiphenomenalist conception of dreams, and quotes the following passage from Binz:

¹ von Monakow and Mourgue, I. B. N., pp. 167-74.

This state (of torpor, *Erstarrung*), however, gradually comes to an end in the hours of early morning. The accumulated products of fatigue in the albumen of the brain gradually diminish. They are slowly decomposed, or carried away by the constantly flowing bloodstream. Here and there individual groups of cells can be distinguished as being awake, while around them all is still in a state of torpidity. The *isolated work of the individual groups* now appears before our clouded consciousness, which is still powerless to control other parts of the brain, which govern the associations. Hence the pictures created, which for the most part correspond to the objective impressions of the immediate past, combine with one another in a wild and uncontrolled fashion. As the number of brain-cells set free constantly increases, the irrationality of the dream becomes constantly less.¹

A little later Freud writes:

The old simile of "the ten fingers of a person ignorant of music running over the keyboard of an instrument" perhaps best illustrates in what esteem the dream is commonly held by the representatives of exact science. Thus conceived, it becomes something wholly insusceptible of interpretation. How could the ten fingers of a player ignorant of music perform a musical composition?²

The essence of the epiphenomenalist conception of the dream consists, as Jones very rightly emphasizes, in maintaining that "the mental processes of which dreams are composed arise without any direct psychical antecedent."³

The theory of excitation is often confused with the strict epiphenomenalist theory, or with its parallelist seasoning. We believe that it is indispensable to distinguish the one from the other. Regarded in its essential features, the theory of excitation simply consists in stressing the indisputable role of *sensory* excitation in certain phenomena such as illusions or coenesthetic dreams. The excitation acts by a strictly sensory path. That is the important point. No claim whatever is made that a physical or physiological cause produces, in the universal sense of the word, a psychological effect. It is simply asserted, as we have unhesitatingly conceded above, that the material reality which is the object of a sensation is a partial cause of the said sensation. It is clear that if it stopped there, the theory would only apply to true sensations, essentially normal phenomena. To this strictly sense-derived nucleus there is added, by association, a fringe which seems to make one with it. The theory of excitation

¹ Binz, *Ueber den Traum*, p. 43. Quoted in I. D., p. 87. Italicized in Freud's text.

² I. D., p. 88.

³ Jones, P. P., p. 188.

does not explain this fringe. One becomes well aware of the limits of this theory if one investigates dreams from the sensory starting-point. Let us first consider those which are derived from extra-ceptivity. As against the excesses of certain supporters of the theory of excitation, Freud has stressed the fact that the same external stimulus may give rise to different dreams in the same dreamer. For example, Hildebrandt on three occasions reacted with a different dream to the sound of his alarm clock: the first time, he seemed to hear the ringing of a village church-bell calling the people to prayer; the second time, he seemed to be in a sleigh drawn by horses with tinkling bells on their harness; the third time, he thought he saw a maid dropping a pile of plates with a crash.¹ If we were dealing with proprioceptive sensations, it would be easy to give similar examples. We observe that we must beware of a double excess. We must not interpret the theory of excitation in an epiphenomenalist or a parallelist sense; on the other hand we must not, in our reaction against this excess, go so far as completely to deny the role of excitation, as some writers who run the psychogenic theory to death sometimes seem to do. The role of excitation is as undeniable as it is limited.

The theory of functional release sets out to explain that which cannot be regarded as the consequence of a destructive lesion or of excitation. The allegiance of physicians has for centuries been divided between two contrary tendencies. Some people, who are drawn to materialism, regard illness merely as the purely passive effect of external causes; in their view, only negative symptoms are of importance. Their opponents, of vitalist orientation, regard illness as an active phenomenon, and only pay attention to the positive symptoms. "People of good, unprejudiced common sense," as Henri Poincaré used to say, "think that both points of view should be taken into account."

Thomas Sydenham, the greatest practical physician of the 17th century and one of the foremost investigators of all times [writes Sigerist] divides symptoms into two groups: *symptomata essentialia*, symptoms caused by the injury, and *symptomata accidentalia*, symptoms which result from the reaction to the injury. When we burn our hand the structure of the tissues is injured by the action of heat. We see signs which are directly due to the injury. The dead tissue acts as a foreign element in the structure of the body and the organism reacts to it, throws it off and supplants it with new cells. We now see a whole group of manifestations which are the expression of this reaction. In this way the clinical picture of a burn shows symptoms, which according to Sydenham are partly the result

¹ I. D., pp. 43-4; I. L., pp. 75-6.

of the injury, partly the result of the reaction to it. In some cases it will be difficult to differentiate between the two.¹

Hughlings Jackson has applied to neurotic disorders a distinction closely akin to that of Sydenham. He contrasts negative with positive symptoms. Negative symptoms proceed directly from the lesion. Positive symptoms, on the contrary, spring from healthy organs. In virtue of the hierarchical organization of the nervous system, whereby the higher "centres" control the lower, the putting out of action of the former entails as a consequence the releasing of the activity of the latter, or "functional release."² The use of this distinction enables one to evade the disadvantages of epiphenomenalism or parallelism, as well as the insufficiencies of the theory of excitation. Of course, the word "centre" must be understood in its wide sense; it would be a serious mistake to give it a parallelist interpretation. Moreover, Jackson's conception needs improvement in one important particular. The great English neurologist seems always to have regarded the cause of the "fall in level," or "dissolution," of the "negative symptoms" as being of a strictly lesional order. "I do not believe," he writes, "that there is such a thing as loss or defect of function of any nervous elements without a proportionate material alteration of their structure and nutrition."³ This is a very narrow formula, and it must be rendered sufficiently flexible to include such phenomena as Pavlov's external and internal inhibition. The temporary cessation of a function may be due to the antagonistic action of another function, or to a tranquillization which *forestalls*—and does not *follow*—exhaustion. We are thus led to distinguish two major groups of disorders—those in which the causes of the negative symptoms are of a lesional order, and those in which they are of a dynamic order.

The first group raises no difficulties. A toxic or infective cause produces a destructive lesion. A certain zone is thus disabled, and a negative symptomatology results. In the hypothesis under consideration, its cause is exclusively organic. Positive symptomatology, on the contrary, is the result of the released action of the sound organs. The positive symptoms have thus a dual cause—organic and psychic. It is strictly impossible to ascribe to them a *solely* material cause. This schema is applicable to the mental diseases which are usually only investigated from an organic point of view, e.g. general

¹ Sigerist, *Man and Medicine*, pp. 96–7.

² *Selected Writings of John Hughlings Jackson*, vol. ii, pp. 411–21. The factors of the insanities.

³ Hughlings Jackson, *op. cit.*, p. 411.

paralysis. Let us leave aside its somatic symptoms, which are of no interest to us here, and let us simply consider its psychic symptoms. Those of a negative character may legitimately be attributed to exclusively material causes. But those exhibiting a positive character must necessarily have causes which are at least partly psychic. There is a psychogenesis of the positive psychic symptoms in general paralysis, which is too often forgotten. Works on the psychopathology of general paralysis are very rare. Minkowski mentions the medical thesis maintained at Zurich in 1917 by Jean Pernet on "the influence of heredity and personal antecedents on the clinical picture of general paralysis."¹ We have not been able to consult this work. The only French publication on the question, so far as we are aware, is Dr. Corman's thesis.² This writer insists primarily on the physical constitution as the predisposing factor in general paralysis. Being versed in Sigaud's morphological theories, he admits the existence of a certain correspondence between the somatic and the psychic constitutions. It is thus indirectly that he comes to take an interest in the role of the psychic factors in the symptomatology of general paralysis. But Corman holds fast to a "typological" point of view. He does not tackle the investigation of the individual psychic symptomatology, considered strictly in its individual aspect. Moreover, it would be extremely difficult to conduct such an investigation satisfactorily. It is understandable that alienists should feel disinclined to do so, and they must not be blamed for it, but one cannot help regretting that the psychopathology of general paralysis should be practically non-existent.

The second group of disorders, that in which the negative symptoms are of a dynamic order, will need longer discussion, for it raises difficult problems. For the sake of greater precision, we shall distinguish two instances of strictly dynamic disorders.

In the first instance, there occurs *first* a fall of level, and *only subsequently* a release. The causes of the fall of level are not to be confused with those of the eruption of the released. The fall of level is produced by an anticipatory defence-mechanism of the type of Pavlov's internal inhibition. The standard example of this is afforded by sleep and dreams. The reader will remember that, according to Pavlov, sleep is simply a generalized internal inhibition. The cessation of the activity of the higher psychic functions is therefore truly dynamic. This cessation permits the release of the lower functions. The mechanism of sleep and dreams is therefore an internal inhibition of the higher functions entailing an external disinhibition of the

¹ Minkowski, *La schizophrénie*, p. 52 (note).

² Corman, *La constitution physique des paralytiques généraux*.

lower functions, which, being thus released, become active. We observe that the cause of sleep is not, properly speaking, the cause of dreams, but only their releaser.

Natural sleep is by no means the only example of the first instance of dynamic disorders. Lhermitte has stated this important concept in a most illuminating fashion.

It is due to the biological or instinctive theory of natural sleep, [he writes] "that we have to-day so much clearer an understanding of the curious phenomena of narcolepsy and cataplexy, as well as of Claparède's hypnomania or the psychopathic sleep described by Laudensheimer.

By these terms must be understood a particular psychic state characterized by the unusual attraction sleep holds for the individual. Take for example one of Laudensheimer's case-histories. A business man of 35, sound in mind and body, asked to be sent to a medical hospital because of his feelings of lassitude and lack of energy. Investigation confirmed that the patient slept deeply and long, that it was difficult to wake him in the morning, and that when woken, he remained for a moment half-asleep, in a state recalling drunken sleep. In the waking state, on the contrary, his mind was perfectly clear. When an attempt was made to discover what were the causes of this tendency to prolonged sleep, it was found that the latter first appeared when the patient's business affairs became involved. Being in a constant state of anxious apprehension lest he should receive bad news, he found that his only real relief from anxiety lay in sleep. If by chance he had any pleasant prospect in view, he would wake up and rise punctually without any difficulty. It must be carefully noted that facts of this kind are very different from instances of sleep produced by intellectual or physical excess. These patients have always regarded their sleep as a state absolutely identical with normal sleep; we may therefore follow Laudensheimer in holding that hypnomania may be regarded as a flight from life's difficulties, from worries, and from the need to take serious decisions, a flight ending in refuge in slumber. This recoil from life's difficulties, this defeatist attitude, is to be found in the melancholic: one seeks a refuge from his agonies in death, another disperses his anxieties by plunging resolutely into sleep; true suicide has a counterpart in the psychological suicide of sleep, as Claparède pithily puts it; hypnomania would thus be a suicide-equivalent for those who still have a love of life, and who prefer to embrace death's brother rather than death himself.

In hypnomania we have a general manifestation whose counterpart in psychiatry is schizophrenia—the flight into illness, as Freud calls it. It is difficult to say whether hypnomania is a frequent psychopathic disorder, but it probably is, for we find examples of it in the work of Willey Erice. However that may be, it is easy to see

that like the morbid forms of sleep, hypomania can only be understood if envisaged as an instinctual disorder.¹

Hypomania is a disorder primarily of biological, morbid brooding of almost exclusively psychological character. Yet both are dependent upon the same fundamental mechanism. Baudouin's work contains a highly advanced study of "retreat-tendencies," regarded as of strictly dynamic order.²

The second instance of strictly dynamic disorder is characterized by the fact that there is no *preliminary* fall of level in any function. In the first instance, it was *internal* inhibition that released the whole process; here it is *external* inhibition. Here the negative symptomatology is derived, instead of being primary, as in the former instance. We again meet Freud's fundamental point of view—that of repression. After all that we have said in the course of this work, it is useless to dwell upon Freud's classical schema. We need only set it in its place among the theories logically akin to it, and emphasize that it is distinguished from Jackson's views by its extremely marked *pluralism*. The English neurologist believes, indeed, that normal human nature implies a perfect control of the lower by the higher psychic functions. Freud, on the contrary, thinks that this perfect control is simply the inaccessible ideal towards which tends the whole effort of culture, and that normal human nature implies a certain antagonism between instinct and reason: *homo ex contrariis compositus*.

The psychogenetical conception which we have just advanced raises difficulties which it is indispensable to consider. Both normal and morbid psychic phenomena have the same psychic roots in the unconscious. No complex is limited to a specific illness. We may, for example, find Œdipus fixations alike in normal, neurotic, and insane people. Complexes, therefore, can only have an ancillary role, for it is quite obvious that the true cause of pathological events is not to be found in normal cases. We are thus led to see in the physiological concomitants of complexes the true pathogenic factors, and thus necessarily revert to a somatogenic explanation.

This conclusion is confirmed by the results of Pavlov's experiments on the production of neuroses by the clash between excitation and inhibition. We have seen that Pavlov never succeeded in producing a neurosis in dogs of the compensated type. Here the role of the constitutional factor is quite obvious.

Lastly, even if one rejects epiphenomenalism and parallelism, it is impossible to admit the existence in man of psychological pheno-

¹ Lhermitte, S., pp. 61-3.

² Baudouin, M. E., pp. 200-10.

mena without physiological conditions. These conditions may be regarded in as non-parallel a manner as one likes—they none the less exist. Never has the existence of a materially unconditioned psychic event been established. What meaning, therefore, can be attached to the concept of *purely* dynamic disorder? However dynamic internal and external inhibition may be, they are accompanied by material processes, since Pavlov has been able to measure the speed of the irradiation and concentration of inhibitions.

It must be conceded that the same fundamental complexes may be found in both healthy and morbid persons. These complexes are therefore not in themselves the determining factors of the morbid state. But a complex is never exactly similar in different individuals. Upon so ill-defined a common basis there arise, owing to the events of life, individual formations of vital importance to the construction of character and neurosis. If in some cases the patient seems only to differ from the normal individual by certain innate or acquired organic conditions, in others the contrast between them seems only to lie in the diversity of the incidents of life which have left their impression on them.

From the point of view of causation [writes Freud] cases of neurotic illness fall into a *series*, within which the two factors—sexual constitution and events experienced, or, if you wish, fixation of Libido and then privation—are represented in such a way that where one of them predominates the other is proportionately less pronounced. At one end of the series stand those extreme cases of whom one can say: These people would have fallen ill whatever happened, whatever they experienced, however merciful life had been to them, because of their anomalous Libido-development. At the other end stand cases which call forth the opposite verdict—they would undoubtedly have escaped illness if life had not put such and such burdens upon them. In the intermediate cases in the series, more or less of the disposing factor (the sexual constitution) is combined with less or more of the injurious impositions of life. Their sexual constitution would not have brought about their neurosis if they had not gone through such and such an experience, and life's vicissitudes would not have worked traumatically upon them if the Libido had been otherwise constituted.¹

We observe that the cause of the disorder is a breakdown of balance. According to the point of view one adopts, one will be led to regard either the external or the internal factor as ætiological. It would be preferable not to envisage either of these factors separately, and to take account primarily of their *relation*.

¹ I. L., pp. 291-2.

As far as Pavlov's experiments are concerned, we have already pointed out that he only employed adult dogs. The results he obtained prove that the development of neuroses by clash of excitation and inhibition requires certain conditions of constitution. Are these conditions due to innateness, or can they also be produced by early and repeated psychic traumata? We cannot at present give any definite answer to this question. To inform us on this point will be the task of experimenters of the future. In any case, reflexology does not at present furnish any decisive objection to the psychogenic point of view we have upheld.

There remains the philosophical difficulty, which, in our opinion, is more serious. It is certain that whereas the psychological phenomena are distinct from the physiological, a psychological event *divorced* from all physiological concomitants is never to be found in man. In this sense it is true to say that there is no such thing as *purely* dynamic disorder. But it will be observed that we have avoided speaking of *purely* dynamic disorders. We have asserted the existence of dynamic disorders *proper*, which is not the same thing. The first formula implies the existence of materially unconditioned psychic operations. The second simply emphasizes the predominance of the psychic element in the ætiology of disorders affecting an operation which is both psychic and somatic. We must be very careful not to confuse psychic predominance in ætiology with psychic predominance in symptomatology. In order clearly to illustrate our meaning, let us take the case of sexual impotence. This is a disorder in the symptomatology of which it seems difficult to dispute the predominance of the somatic aspect. Let us now adopt the ætiological standpoint. First we find strictly lesional impotence, as for instance in tabes. This is of no interest to us here. Next there is the purely temporary impotence of the individual who has just achieved coitus, and who cannot repeat it until after a certain interval—which is, indeed, essentially variable. The ætiology of this impotence is dynamic, but predominantly material. Let us lastly take the instance of the man whose erection subsides at the moment of intromission because an antagonistic psychic factor, e.g. the fear of contracting a venereal disease, suddenly occurs to his mind. Here we have an impotence of dynamic ætiology, but this time preponderantly psychic. It is quite clear that the psychological phenomenon of fear possesses physiological concomitants. But it is no less clear that impotence following coitus must not be confused with that of the individual who fears syphilis. However much one may stress the existence of physiological concomitants, one will be compelled, unless one is prepared to distort the facts, to recognize that there are

instances in which the preponderant ætiological role belongs to the psychic element.

We have chosen the instance of psychogenic impotence because it is a good illustration of the nature of predominantly psychic dynamic ætiology. It gives a good grasp of the role of external inhibition, and constitutes a typical example of disorder without preliminary fall of level. It has a primarily somatic aspect, but we must not lose sight of the fact that besides genital impotence there are true cases of "affective impotence," which depend upon the same inhibitory mechanism, and not upon a primary deficiency.

It seems to us that a *provisional* synthesis may be drawn from our discussion of the various theories of the ætiology of psychic disorders. The negative symptoms may proceed either from a destructive lesion, or from exhaustion, or from an internal inhibition preceding exhaustion, or from an external inhibition. The positive symptoms may proceed either from an excitation combined with a functional release, or from a functional release alone. The negative psychic symptoms *may* have an exclusively material cause, but they may also be derived from a mixed ætiology, predominantly psychic, by external or internal inhibition. The positive psychic symptoms *always* have a mixed ætiology, predominantly psychic.

Our discussion of the ætiological theories of psychic disorders has inevitably led us to encroach upon the problem of the ætiology of somatic disorders. The instance of psychogenic impotence shows the indisputable existence of disorders of a somatic character, but of predominantly psychic ætiology.

When dealing with hysteria in vol. I, we gave a long exposition of the theories on the psychogenesis of apparently organic symptoms held by orthodox psychologists since Babinski. Let us briefly recall one or two important points. In Babinski's view, hysteria is a product of the imagination much more than of the affectivity. An individual is paralysed *because* he allowed himself to imagine that he was going to be paralysed. The limits of the power of suggestion do not exceed those of the will. Emotional disorders are contrasted with pithiatic. The physiological phenomena of the emotion are not characteristically determined by a representational anticipation. When a person exhibits acceleration of the cardiac rhythm on the receipt of bad news, that acceleration does not take place *because* the person imagined that it would. Emotion may cause physiological modifications which could not be achieved by the will.

This sharp distinction between pithiatic and emotional disorders gives us a schema which is both useful and attractive. Unfortunately it was gradually realized that it was insufficient to explain the facts.

Babinski, with his collaborator Froment, was the first to recognize that war-neurology raised problems which were not solved by his original conception. He made up his mind to insert "physiopathic" between lesional and pithiatic disorders. It is only fair to recognize that this was an addition rather than a correction.

The examination of conditioned reflexes has still more seriously modified the classically simple theory of the causality of the psychic with reference to the organic, as held by Babinski's school. The conditioned reflex is a phenomenon with specific characteristics, which cannot be reduced either to suggestion or to emotion. Various experimenters have brought forward facts which compelled the recognition that physiological phenomena, not under the control of the will, could be modified by the conditioned reflex, a psychic process which could not be reduced either to suggestion or to simple emotion.

Marinesco, Sager and Kreindler have published a very interesting case-history of a hysterical girl of seventeen, in which, by the use of conditioned reflexes, they "succeeded in influencing a purely autonomic function, outside the control of the will, viz. secretion of urine."¹ This result is particularly remarkable owing to the fact that it was achieved in a human being. Métalnikov, working on animals, asserts that he has been able, also by means of conditioned reflexes, to modify such strictly physiological phenomena as the increase of leucocytes and the formation of antibodies.²

Here we must forestall a serious confusion. Pavlov has attempted to reduce suggestion to conditioned reflex.³ Most writers who have investigated conditioned reflexes have accepted his point of view. We believe, on the contrary, that suggestion is not reducible to conditioned reflex. As we have already said in a previous chapter, suggestion is the unconscious and involuntary realization of the content of a representation. The typical example of suggestion is Chevreuil's pendulum-experiment. It is clear that this experiment is in no way comparable to a conditioned reflex. Pavlov's mistake was due to the fact that he only took verbal suggestion into consideration. Accustomed by his method only to pay attention to that which is accessible to the physiologist's external observation, he does not see what constitutes the essence of suggestion—the transition from the representation of a movement to that actual movement. It is clear that the physiological method cannot reach the representation. Pavlov has

¹ Marinesco, Sager, and Kreindler, "Hystérie et reflexes conditionnels," in *Revue Neurologique*, 1931, first term, p. 726.

² Métalnikov, *Rôle du système nerveux et des facteurs biologiques et psychiques dans l'immunité*, pp. 110–20.

³ Pavlov, C. R., p. 407.

been led hereby seriously to modify the meaning of the word suggestion. For a better illustration of the difference between suggestion and conditioned reflex, let us return to Marinesco's experiment.

Every morning at the same time [he writes] we pass a catheter on the patient and weigh her. Afterwards she is left alone in her room for half-an-hour, lying on her bed; later we play her a gramophone record. She drinks two glasses of water to the sound of the music. Two hours and a half later, the patient still remaining quiet, we again catheterize her, and determine the quantity and specific gravity of the urine. Lastly, the patient is again weighed. This experiment was repeated five days running in exactly similar conditions (same time for catheterization, same room, same tune, etc.) On the sixth day the experiment was repeated with exactly the same factors (catheterization, isolation), but without giving the patient water to drink when the tune was played. We then made the interesting observation that without having drunk, she passed a quantity of urine corresponding to about two glasses of water (500 cmc.), still of low specific gravity. We succeeded five times in obtaining the same results. The interpolation of one day of complete rest did not affect the conditioned reflex on the following day. Another day, we examined the patient's urine without isolating her, or playing her a tune, but leaving her to her own devices in the general ward. In these conditions, the quantity emitted was only 150 cmc. in two and a half hours, with a specific gravity of 1,020.¹

In order to ascribe the result of Marinesco's experiment exclusively to suggestion, we must premise that the secretion of urine was determined by the representation thereof, and by that representation alone. Now what actually determined the secretion of urine was the tune (conditioned stimulus), from the fact of its repeated coincidence with the drinking of two glasses of water (absolute stimulus). The difference between suggestion and conditioned reflex thus becomes obvious. All that we can say is that, in the experiment in question, the influence of suggestion must very probably have been added to that of the conditioned stimulus. It is probable that the representation of the secretion of urine coexisted in the patient's psychism with the hearing of the tune. It is this conjunction of suggestion and conditioned reflex that explains some of Marinesco's formulæ, which, taken in their strict sense, would be seriously inaccurate. After having quoted three case-histories of patients in which the injection of an intrinsically efficacious drug could, after some days, be replaced by an injection of distilled water with the same result, Marinesco and his collaborators write: "We have since then had numerous opportuni-

¹ Marinesco, Sager, and Kreindler, *op. cit.*, pp. 726-7.

ties of verifying these apparently paradoxical phenomena of the disappearance of conditions with an undoubted organic basis, produced by an injection of distilled water."¹ What actually brought about the disappearance of the condition? Was it the injection? If so, it is a conditioned reflex. Was it the representation of the cessation of the condition? In that case, it is really suggestion. Was it the joint action of the injection and the representation of the cessation of the condition? In this last hypothesis, we must say that both conditioned reflex and suggestion occurred. Marinesco and his collaborators do not make these distinctions, and speak indiscriminately of suggestion or of conditioned reflex. This procedure creates confusion.

We observe that speech may act in two ways: (i) as a conditioned stimulus which has coincided with an absolute stimulus, or (ii) as understood speech producing by suggestion the effect it aims at producing. This distinction has been partially grasped by writers who yet confuse suggestion with conditioned reflex. Thus Métalnikov, for example, writes:

We must at once say that speech alone plays no part in the acquisition of conditioned reflexes. For example, the words "I am in pain" only acquire a specific meaning when they are associated with the action of a stimulus which creates real pain, such as a burn or a prick, i.e. not until after one has produced a specific reaction of the nervous system to the words "I am in pain."²

If the understanding of the words "I am in pain" is not sufficient to produce pain, and if these words do not acquire the power to produce it until after the hearing of them had coincided with some stimulus such as a prick or a burn, how can one still claim to identify suggestion with conditioned reflex?

The conclusion to be drawn from experiments on conditioned reflexes is therefore that the conditioned reflex, a psychological phenomenon neglected in Babinski's time, and not reducible either to simple emotion or to suggestion proper, may produce in the organism modifications which could not be achieved by the action of the will. Here again we have an addition to rather than a correction of Babinski's results. We cannot therefore accept the assertions of Marinesco, Sager and Kreindler, such as they are formulated, at least so long as these writers seem to deduce the power of suggestion from that of conditioned reflexes. Owing to their identification of these two phenomena, they think that suggestion seems "also to have an effect upon autonomic, and not only upon volitional phe-

¹ Marinesco, Sager, and Kreindler, op. cit., p. 723.

² Métalnikov, *Rôle du système nerveux*, etc., p. 132.

nomena."¹ If Marinesco's statement required a literal interpretation, the fundamental principle of Babinski's doctrine—"Simulation can reproduce everything that hysteria is capable of doing. Anything that is impossible for simulation is also impossible for hysteria"²—would be refuted experimentally.

Although the experiments on conditioned reflexes do not demonstrate the error of Babinski's assertion that suggestion cannot accomplish more than the will, it must be admitted that they lead us quite naturally to query the solidity of Babinski's construction. For a strict refutation of Babinski's theory, one would have to adduce experiments in which suggestion *taken separately* modified phenomena which were not volitional. We know of no completely satisfactory experiment of this kind. Those conducted by physicians or physiologists generally err through the inexactness with which suggestion is brought into play. The reader may have realized this from our remarks on Marinesco. Experiments conducted by psychologists, on the contrary, are insufficient from the point of view of the observation of physiological results. We have nowhere come across an absolutely strict experimental proof of the production by *pure* suggestion of a non-volitional phenomenon. Yet facts observed in connection with epidemic encephalitis have induced excellent neurologists to consider a revision of the theory of pithiatism. Babinski's idea that an apparently organic but psychogenic disorder is always distinguishable from a truly organic and somatogenic disorder *by its intrinsic characteristics alone*, is now challenged by the idea (which seemed to have died with Charcot) that one and the same organic disorder may be due either to a somatic or to a psychic cause, and that the intrinsic characteristics of a symptom are not always sufficient to settle the problem of its extrinsic causes. Oculogyral crises are a phenomenon of indubitably organic origin, yet Marinesco has been able to establish that in some of his encephalitic patients, such conditions only appeared subsequently to a true mental contagion. "Two of our Parkinsonian patients, A. T. and V. J., only began to exhibit oculogyral crises when they had been placed in contact with the patient S., and witnessed his similar attacks on several occasions."³ Van Bogaert has made similar observations.⁴

¹ Marinesco, Sager, and Kreindler, *op. cit.*, p. 727.

² Babinski and Froment, *Hysteria or Pithiatism*, p. 217.

³ Marinesco and Radovici, "Des rapports de l'encéphalite épidémique avec certains troubles hystériques," in *Journal de Neurologie et de Psychiatrie*, vol. xxvi, pp. 263-4.

⁴ Van Bogaert, "Contagion des crises oculogyres chez des parkinsoniens postencéphaliques," in *Journal de Neurologie et de Psychiatrie*, vol. xxvi, pp. 269-80.

Some clinicians have deduced from the investigation of epidemic encephalitis that, since the most apparently psychic disorders could be exhibited in von Economo's disease, it was legitimate to assert that hysteria could be classed among the extra-pyramidal syndromes, and that the concept of neurosis *sine materia* must disappear.

This calls for some critical reflections. Firstly, we sharply dissent from such writers (if any still exist) as maintain the existence of psychic processes without organic concomitants. We have been careful above to define our position in this matter exactly by stating explicitly that the maximum that one could accept was the *pre-dominance*—and not the exclusiveness—of the psychic factor in the ætiology of certain disorders. Secondly, the protagonists of the theory we are criticizing only take half the facts into account. If the discovery had been *only* that a symptomatology absolutely analogous to that of pithiatism could be reproduced by encephalitis, we should understand their point of view. But the psychic contagion of oculo-gyral crises, and the influence of psychotherapy upon indisputably organic disorders, have also been established. It is quite inadmissible that this aspect of the question—the real obverse of the medal—should not be taken into consideration.

Having disposed of this difficulty, we can advance our conclusions concerning the influence of the psychic factor in the ætiology of disorders of organic character.

So far as suggestion in the strict sense is concerned, we do not think that the attempts rigorously to refute Babinski's assertion that suggestion can do nothing that the will cannot do, have hitherto been successful. We do not by any means assert that Babinski's theory is true. In our view, the question must be reconsidered in a new light.

But where conditioned reflexes are concerned, we regard it as established that this psychological process may provoke organic phenomena over which the will has no control. Later we shall see the importance of this concept in defining the field of action of psychotherapy.

II. The Privileged Ætiological Role of Sexuality

Having worked out a theory—a provisional theory, we must insist—of psychic disorder, we must now attempt to define the exact role of the sexual instinct in the genesis of psychological symptoms.

We shall deal in turn with the negative and with the positive symptoms.

So far as the negative symptoms are concerned, it is clear that

not only is psychosexuality not a necessary ætiological factor, but also that its role is fairly limited. Negative symptomatology is the field in which purely somatic explanations may be exhaustive. It matters little whether the case be one of irreversible lesion or of reversible exhaustion. The only instances in which the question of a psychosexual ætiology may arise are those in which the negative symptom is due to an inhibition, whether internal or external. Must all the symptoms of inhibition be referred to the sexual instinct? *A priori*, there is no reason why they should be. Sleep is an internal inhibition extending to the whole higher psychism. It would be utterly absurd to regard sleep as a sexual phenomenon. Can it even be said that hypomania always has a sexual ætiology? *A priori*, it is clearly illegitimate to say so. *A posteriori* proof of one's claim is necessary to ascribe a sexual ætiology to a negative symptom.

Two observations seem to us necessary, in so far as the application of this proof is concerned. The first bears upon the very concept of sexual instinct, to which Freud and his opponents do not give the same meaning. It is clear that if one believes that the sexual and the genital are identical, one will not advance the same solution for the problem of the ætiology of the symptoms of inhibition as one would if one accepted the theory that the sexual is more extensive than the genital. The solution that we suggest is in terms of the concept of the sexual instinct which we put forward in the preceding chapter, a concept which does not coincide exactly either with that of Freud or with that of his opponents. Our second observation concerns the criteria for attributing a symptom to its unconscious causes. Here again it is important to bear in mind that different solutions correspond to different methodological principles. Our views on methodology have been set out at length in the third chapter of this volume. No one has hitherto succeeded in relating *all* the symptoms of inhibition to the sexual instinct, as we have defined it, by proofs which satisfy the criteria of interpretation, such as we have also defined them. It is clear that we do not agree either with Freud's opponents or with his orthodox followers. We have two objections to offer to his opponents. Firstly, most of them have a much too narrow conception of the sexual, which they tend to confuse with the genital. Secondly, one may say that there is hardly a single one of Freud's opponents who has realized that one can define the psycho-analytical method in a manner quite independent of all sexological theories, and that in favourable cases, this method may reach certainties as stable as those obtained in all the other disciplines which aim at relating one concrete fact to another. To the strict Freudians, we have also two objections to offer. Firstly, their conception of the sexual

instinct is too extensive; it frequently sets essential and accidental connections on the same level. Secondly, like their opponents, the Freudians confuse method and doctrine. They pay no attention to the conditions of application of proof, and remain alien to the idea of an impartial methodology.

Whereas, so far as the negative symptomatology is concerned, the ætiological role of psychosexuality is, although perfectly real, merely of secondary importance, the question arises much more acutely when one comes to the study of the positive symptomatology. It must be recognized that in this field the importance of the sexual factor is vital. It remains to be seen whether, as the strict Freudians maintain, *all* the positive symptoms of the psychoneuroses (and even of the psychoses) have a sexual foundation. Frink has treated this subject with his usual clarity.

The essential matter at present [he writes] is not so much *why* the sexual factor is the central one in the neurosis but that it *is*. Freud's statements are based on empirical observation, not on theoretical speculation. I am well aware that certain individuals have published reports of cases in which, they assert, the sexual factor was absent, and that all symptoms were to be explained on other grounds. But there are no real exceptions to Freud's rule. I do not hesitate to assert that the sexual factor was present in these cases but that the observer failed to see it. This is evident ordinarily from the reports themselves. For on the one hand they show the sexual element present in some veiled form, and on the other that the observer was totally ignorant of the means (and often of the need) of overcoming the patient's resistances in order to allow this factor to come to clear expression.

No one would be so absurd as to assert that persons exist who have no sexual instinct at all. The most frigid woman has a sexual instinct, even granting (which is most unlikely) that she has not and never did have any conscious sexual feelings. And if she has a sexual instinct, it must play *some* part in her mental life, even supposing (another impossible state of affairs) that it is wholly confined to the Unconscious. In the face of the numberless observations which found the sexual factor present and dominant in the neurosis, the only sort of case report that should have any weight against Freud's statement would be one which not only connected the symptoms with exclusively non-sexual factors, but at the same time traced the sexual instinct through all its ramifications and showed what it *was* doing and how it *did* manifest itself. Nobody has ever done this or apparently even attempted it. Those who assert that the symptoms in their cases were of non-sexual origin tell us nothing of how the sex impulses were disposed of in these patients. With a force so subtle, so pervasive and so wide in its radiations as the sex

instinct no one should trust himself to say where it *isn't*, unless he knows in fullest detail where it *is*.¹

Here again we are in agreement neither with the strict Freudians nor with their opponents. The Freudians cherish illusions upon the validity of the demonstrations they have been able to adduce. We have not the slightest hesitation in admitting that in many cases the observer has reached a true conclusion, but the fundamental quality of scientific certainty is its capability of transmission, of claiming the acceptance of everyone, of achieving "mental convergence," in Auguste Comte's phrase. The case-histories published by the Freudians are very far from attaining this ideal of objectivity. Conversely their opponents make a mistake in claiming that it is certain and obvious a priori that the theory of the monosexualist origin of positive symptoms is false. The falsity of this ætiological assertion is neither obvious nor even certain. A priori, it is as good a hypothesis as any other; which must be submitted to the inspection of the experimental method. Allendy has very rightly emphasized this vital point:

Theories, both Freudian and anti-Freudian, can only be deduced from psychoanalytical facts, from the documentary evidence of those who use the method; we cannot therefore expect instructive information from outsiders. Let us take an example: the psychoanalytical method may be compared to Mariotte's formulated law on the volume and pressure of gases; laymen might discuss Mariotte's law for ever without elucidating it in the slightest degree. It is only by virtue of the experimentation that has entitled them to do so that physicists have lately come to recognize that this law no longer obtained beyond certain limits, and thus to modify the theories relating to gases. In the same way, judgments based on sentiment have no validity whatever where Freudism is concerned; if the latter must one day be revised, it will be simply in virtue of psychoanalytical facts, and only its practitioners will be legitimately entitled to suggest correctives or variants. Freudism, the deduction from psychoanalytical facts, can only be opposed or modified by psychoanalytical facts.²

Allendy's general claim is perfectly justified, but his comparison between the psycho-analytical method and Mariotte's law is unfortunate. It is the Freudian doctrine that is comparable to Mariotte's law. The psycho-analytical method is comparable to the logical and formal rules and formulæ that guide physicists in their experimental researches. Pierre Curie has made very remarkable deductions from

¹ Frink, M. F., pp. 135-6.

² Allendy, P., p. 14.

the highly abstract principle that "the symmetry of causes subsists in their effects." Hughlings Jackson has used, to equally good purpose, the no less abstract principle that "no positive event can have a negative cause." These two examples well illustrate the parallelism of the strictly methodological principles in physics and in neuropsychiatry. In the particular instance of psycho-analysis, the governing principles of the method have not yet, it seems, been sufficiently clearly disclosed. These are the principles which we have tried to expound in the third chapter of this volume, under the head of the criteria of interpretation. We therefore believe we may, when dealing with positive symptoms, once more apply a transposed version of the formula which we used in dealing with the symptoms of inhibition. No one has hitherto succeeded in relating *all* the positive symptoms to the sexual instinct, as we have defined it, by proofs which satisfy the criteria of interpretation, such as we have also defined them.

The problem is particularly difficult when it involves complexes which have never been conscious. Since we are writing a didactic work, we have systematically eliminated instances of this kind, which do not suit the purposes of demonstration. But we must recognize that in practice they are the most frequent. Let us take the Oedipus complex. The example which we have given, that of our patient Adolphe, is conspicuously obvious, and was chosen for that very reason—but it is quite exceptional. Usually the incestuous tendency, never having been conscious, can only be reached by reconstructive reasoning. Here is an example, quoted from Pfister, which forms a striking contrast with that of Adolphe. A man aged twenty-seven came to consult Pfister because after many years of study and repeated attempts to find a situation, he had always failed. He was in a condition of terrible anxiety, dared not go out and meet people, and lacked self-confidence. The anxiety had broken out (after a number of symptoms which Pfister mentions without dwelling upon them) when the patient, who was then about fifteen, had made up his mind to become a dentist. In connection with this intention, the patient said that he could clearly remember a painful experience of childhood. Before going to school, he had discovered his mother in the very act of committing adultery with a dentist. The memory was so clear that he regarded any possibility of its being mistaken as quite out of the question. If we accept the Freudian theory that neurotic anxiety is derived from an unsatisfied sexual impulse, the coincidence of the choice of the dentist's profession and of the eruption of anxiety offers no further mystery. Without realizing it, the young man wanted to take the place of the dentist. Pfister adds that

of course this interpretation will only satisfy those who have personally investigated a number of patients of this type.¹

The contrast between our patient Adolphe and Pfister's patient is absolutely clear. Adolphe's incestuous impulse was perfectly conscious; in the would-be dentist, it was far otherwise. Upon what is Pfister's interpretation based? We think that its justification might properly be advanced somewhat as follows. The patient himself indicates that his anxiety broke out at the moment when he thought of becoming a dentist; this temporal coincidence gives us a first indication suggesting *that* the anxiety might depend on that particular project. The childhood's memory, of which the patient declares himself so certain, explains *why* the idea of becoming a dentist involves anxiety, i.e. it implies a certain resemblance to his mother's lover. It constitutes a second indication, converging with the first. We thus reach the hypothesis that the patient fears a temptation to incest. A fear may be regarded as primary when it concerns a danger external to the ego, but is it probable to admit that the fear of an impulse emanating from the ego itself may exist without any foundation whatever? Is it not more logical to think that it can only be explained if the impulse in question has some degree of reality? Let us suppose that in a general way the argument we have just advanced is to be regarded as insufficient, and let us grant that in the abstract the fear of an impulse emanating from the ego may be absolutely groundless. In the actual case that we are discussing, there is an aspect of the question which must be emphasized: *why* did the young man want to become a dentist? If the choice of a dentist's career had not been made by the patient himself, if this profession had been forced upon him entirely from outside, one might just possibly understand his anxiety, but the Œdipus interpretation would be much less substantial. Now Pfister tells us that it was when the *intention* of becoming a dentist occurred to his patient's consciousness that the neurosis broke out. The Œdipus interpretation explains *both* the choice of the dental profession, and the anxious reaction to that choice.

This example shows us how difficult it is to come to a conclusion concerning the reality of an incestuous tendency which has remained unconscious. In the foregoing chapter we investigated infantile sexuality from a semeiological point of view. That must clearly be our starting-point, but it is impossible to remain there. Sooner or later, we are induced to wonder whether, besides instances in which the existence of a sexual activity in the child may be diagnosed from

¹ Pfister, P. M., pp. 164-5.

clinical signs, there are not other instances of "unapparent"¹ sexual activity, which can only be reached by means of psycho-analytical interpretation. It seems to us more than likely that this question must be answered in the affirmative. But then a new question arises. If, besides instances of apparent infantile sexuality, there are instances of "unapparent" infantile sexuality, are there still further instances of children without any psychosexual activity at all, whether apparent or "unapparent"? Here we must merely confess our complete inability to settle the question one way or the other. We have written above that the absence of exact sexual manifestations in childhood seemed to us as normal as their presence. We still maintain this assertion. But it is quite clear that we do not thereby claim that improvement of the psycho-analytical methods of exploration may not enable us to demonstrate the presence of a genuine sexual activity which clinical "macroscopic" investigation failed to reveal. We cannot foretell the future of science.

III. The Therapeutics of Psychic Disorders

Although one's conception of the origin of psychic disorders must tend to orientate their therapeutics in one direction or in another, we must not fail to recognize that theory can only give a preliminary indication, and that in the last resort a therapeutic system must be judged by its results.

As far back as we can go in the history of medicine, we find that psychic disorders have been treated either by material or by psychic means.

What we have said above makes the use of material means to cure psychic disorders perfectly conceivable. If there is no human activity, however highly spiritual, which does not imply an organic conditioning, it is clear that in a great number of instances the normal therapeutic procedure will be to restore these organic conditions to order. Experience confirms this theoretical deduction. The purely somatic treatment of mental diseases has achieved striking successes; we need only recall the standard example of malaria-therapy in general paralysis.

The problem before us is to ascertain whether, as certain writers seem to hope, somatic treatment will make the use of psychic means quite unnecessary. While recognizing the danger of attempting to foretell the future, we believe that we may, in all probability, regard this hope as vain. There are certain disorders in which, however real

¹ This expression was suggested to us by the very interesting concept of "unapparent infections" introduced by Charles Nicolle. (D.)

the organic component may be, the ætiological role of the psychic factor is absolutely preponderant. Let us consider dress fetishism, for example. We have seen in the foregoing chapter that the specific and governing element in this sexopathy by paradifferentiation of the object could only be acquired and psychogenic. All that we can ascribe to the somatic causes in a disorder of this kind is a certain innate or acquired lack of differentiation of the normal sexual impulse. It follows from this that a somatic therapy, *of whatever kind*, will have no *direct* bearing upon the formal element of the disorder—paradifferentiation of the object. Experience confirms this. We find on the one hand very mild fetichisms, manifested sporadically during childhood, and swept away by the onset of puberty; on the other hand, very stubborn fetichisms, in the treatment of which somatic therapies fail completely. It is clearly conceivable that some day one may discover a purely organic process enabling the *normal* sexual impulse to be strengthened (as Moll's association-therapy does by psychic means), but will this strengthening be sufficient to cause the disappearance of the sexopathy? It may possibly succeed in certain instances, but we very much doubt whether this would be the general rule. We must not forget that in his association-therapy, Moll does not simply develop the normal component, but insists on the vital importance of voluntary rejection of the abnormal images.¹ His method, therefore, involves a dual process: on the one hand, development of the normal, on the other, obliteration of the abnormal component. This negative and destructive part can only be achieved, apparently, by psychic means: whether, like Moll, one is content merely with a voluntary elimination, or whether one uses the psycho-analytical process of breaking down a tendency by reintegrating in the field of consciousness the recollection of the events which gave rise to it. Somatic treatment will always be incapable of *direct* action against paradifferentiation. We are therefore at liberty to think that in stubborn cases we must always have recourse to psychotherapy.

It must never be forgotten that psychotherapy is defined by the *means* which it uses, and not by the *end* which it seeks to attain. It is the employment with a view to achieving cure of psychological means—or, more exactly, means derived from psychological *determinism*. The end at which it aims is dual. Its proper and principal end is the cure of disorders of psychic character. Its secondary end is the cure of disorders of somatic character. This dualism in the aim of psychotherapy requires some elucidation.

Those who have come under the influence of Babinski's teaching

¹ Krafft Ebing and Moll, P. S., pp. 768–9.

generally have an extremely incomplete idea of the psychotherapy of disorders of somatic character. In their view, it is limited to the use of counter-suggestion so as to cause the disappearance of the pithiatic symptoms, i.e. those essentially capable of voluntary simulation. If psychotherapy were no more than this, it would be poor indeed. We have seen above that emotion and conditioned reflexes could produce in the organism modifications which could not be achieved by the will. It follows from this that psychotherapy (even if we admit Babinski's theory that suggestion can do nothing more than the will) has an immense field open before it, as soon as it is recognized that it must be primarily concerned with affectivity. One may by synthesis create useful conditioned reflexes, and by analysis destroy harmful ones. This accounts for the efficacy of psychotherapy in gastric neuroses, which so many writers have pointed out. Digestive disorders cannot of course be brought about by the will, yet psychotherapy has sometimes an astonishing effect upon them. This ceases to be a paradox when once one realizes the primal role of affectivity. We might quote many other instances of functional disorders of somatic character, which cannot be brought about by the will, yet can often be successfully treated by psychotherapy, e.g. headaches, heart palpitations, menstrual irregularities, and *ejaculatio præcox*.

But the principal end of psychotherapy is the cure of psychic disorders. In the present state of our knowledge, the efficacy of psychotherapy is limited to disorders which leave the patient's powers of self-criticism unimpaired. As a general rule, delusions resist psychotherapy. We cannot at present say whether this unfortunate fact is due to technical insufficiency which may some day be overcome, or whether, on the contrary, the ætiology of delusions involves some somatic factors, against which the use of psychic means will always and inevitably be ineffective. This problem is particularly acute in the case of patients with ideas of reference and persecution. Such patients often seem to possess a wholly unimpaired mental background; their delusions are confined to a strictly limited theme. This selectivity shown in the delusional thematism quite naturally suggests the hypothesis of a preponderant psychogenesis, which implies psychotherapeutic possibilities. Now general experience shows that paranoiacs are quite unamenable to psychological treatment. In the face of this harsh contradiction of experience, we are led to return to the original data of the problem. This has been most thoroughly carried out by Dr. Lacan, in a remarkable thesis. He reaches some important conclusions. The concept of "paranoiac constitution," so dear to French writers, calls for distinct reserve.¹ On the contrary,

¹ Lacan, P. P., pp. 62-3, 96.

careful clinical investigation apparently shows "that the moments of development in which the delusion is created, the *instants of conception* of the psychosis, if we may call them so, are manifested in disorders which are clinically identical with those of the organic psychoses, although less well marked and more transitory."¹ Attempts to elucidate the psychogenesis lose nothing of their validity, but must, it would appear, fall short of reaching an irreducible organic element.² Dream and dream-like states, upon which Lacan does not dwell,³ deserve, in our view, very serious attention. Where they play an important role, we leave the confines of paranoia in the narrow sense, but that is unimportant so far as our psychological (not nosographical) aim is concerned. The point in Lacan's work which seems to us most rich in promises for the future is the employment of the psychological method to define the boundaries of the sphere of validity of psychogenesis. Psychology thus seems capable of defining its own frontiers.⁴ This is an idea borrowed from phenomenology, which Jaspers develops, relying on the difference between *comprehension* and *explanation*.⁵ Jaspers' metaphysics differs from ours. Our philosophical conception of causality does not allow us to accept, at least in the form in which he conceives it, this antithesis. But we believe that this antithesis, recast and transposed, may prompt very fruitful researches into the relations between the psychic and the somatic.

Psychotherapeutic methods may be divided into two main groups according as they set out to develop useful tendencies (synthetic or prospective psychotherapy, directed towards the construction of the future), or to resolve the causes of disorders (analytical or reductive psychotherapy, aiming at the liquidation of the past).

The work of psychic synthesis may be achieved in three ways, according as one deals with the will, affectivity, or suggestion.

Education of the free will forms no part of psychotherapy in the strict sense of the latter expression. In order to set the will to work, it must be provided with an ideal, a *Weltanschauung*, a doctrine of man's place in the universe. But to do this is to leave the sphere of science to enter that of metaphysics.

Science [Jaspers very rightly observes] has not to lay down rules but to observe facts. And its only duty is to make these *facts* known to all men. As for decisions based upon the knowledge of facts and the consciousness of the end in view, that is a matter for in-

¹ Lacan, P. P., p. 97. ² Lacan, P. P., p. 98. ³ Lacan, P. P., pp. 113-18.

⁴ Lacan, P. P., pp. 137-43.

⁵ Jaspers, P. G., pp. 25-6, 274-90.

dividuals, or for forces of which other conceptions of the world are the origin, but in no case are they the concern of science.¹

The education of the will, owing to the *aim* which it inculcates, is the concern of morality or religion, but not of psychotherapy. The latter differs from moral or religious education not only in its *aim*, but in its *means* as well. Whereas morality or religion use *liberty*, psychotherapy uses *determinism*. It is essential strongly to stress this point, for it is practically and theoretically neglected by many writers. The phenomena which psychotherapy sets out to modify are pathological phenomena, not moral faults. Its aim is not to make people virtuous, but to restore them to health. Where physical health is concerned, its distinction from virtue is bluntly clear: no one will say that heart palpitations are moral faults. Where mental health is concerned, it is strange to find some people confusing it with virtue. Yet even in the normal field, the distinction between psychological determinism and morality is easy to grasp. Intellectual and artistic aptitudes are indisputably psychological, yet they do not depend upon morality. No one could be morally blamed for lack of aptitude for mathematics or sculpture. The most heroic moral efforts fail to transcend the limitations of the psychic capacities. The same is true *a fortiori* in the sphere of the abnormal psychism: the will is powerless when confronted with a feeling of depersonalization. Psychic health, so far from being identical with virtue, is one of its premises. We therefore see that, whereas morality aims at achieving man's whole and supreme good by means of the free will, psychotherapy aims at achieving a partial and relative human good—psychic or somatic health—by means of psychological determinism. To classify the cultivation of the free will as a part of psychotherapy is to confuse essentials.

This confusion is to be found in many writers of the Zurich school. Thus Maeder, for example, writes:

Thus understood, the *physician's ideal* is not essentially to cure the patient of insomnia, neuralgia, or phobias, but rather to act as a stimulator of consciences and a trainer of men, as *an animator*, with a place beside the educator, the politician, the priest, the artist, and the philosopher, in the true live meaning of the word.²

We, on the contrary, shall say that the aim of the physician is exclusively to cure the patient of insomnia, neuralgia, or phobias; the clinician who sets himself up as a stimulator of consciences and

¹ Jaspers, P. G., pp. 419–20. *Italicized in the text.*

² Maeder, "De la psychanalyse à la psychosynthèse," in *L'Encéphale*, 1926, p. 584. *Italicized in the text.*

a trainer of men is trespassing on the domain of the educator and the moralist.

It is rather astonishing to find the same mistake in Jaspers. This writer distinguishes three principal lines of psychotherapy—suggestion, psycho-analysis, and appeal to the patient's personality.¹ Suggestion and psycho-analysis come indisputably under the head of psychotherapy. The same is not true of appeal to the patient's personality. Jaspers recognizes that this method is based upon the physician's general philosophy and *Weltanschauung*. He likewise admits that each "patient" has a different conception of the "health" he hopes to see re-established by the psychotherapist.

The one [he writes] regards "health" as a life without thought, optimistic and drily humorous, another as the consciousness of the constant presence of God, a religious feeling accompanied by moral calm and hopefulness and confidence in the world and in the future. The third feels in good health when all the unpleasantness of his life, the acts which cause him shame, the whole "obverse," as it were, of his circumstances, are covered over with unconscious dishonesty by deceptive ideals and illusory interpretations.²

Actually, all this has nothing to do with psychic health or with psychotherapy. To invest the latter with excessive ambitions can only end in discrediting it. The exclusive role of psychotherapy is to rid the patient of strictly pathological phenomena, and not to supply him with systems of metaphysics, morality or politics.

The realization of psychic synthesis by the free will having been excluded from psychotherapy, we may say that the latter begins with the therapeutic use of affectivity. The patient feels the need of understanding and kindness. Very often, when a nervous patient finds the understanding sympathy which he lacked, his condition improves as though by magic. Yet he himself has made no effort of will, and his confidant has used no psychological technique. The healer (who is often quite unconscious that he is a healer) has simply showed signs of humanity and of intelligence. He has expounded no general theory or system. He has listened without being niggardly with his time. He has known how to hold his tongue. He has sympathized. Many mild neuroses are cured without further ado.

Suggestion-therapy needs no long exposition after what we have said so often concerning the definition of suggestion and the limits of its powers. Let us merely recall that suggestion is an *endo*-psychic, not an *intro*-psychic process. The influence of an outsider is by no means essential to the process of suggestion, which, as we have seen,

¹ Jaspers, P. G., pp. 605-12.

² Jaspers, P. G., p. 608.

must be defined as the extra-conscious and extra-voluntary realization of the content of a representation. We are therefore really confronted with an instance of psychological determinism, capable of being used for therapeutic ends, which is the very characteristic of psychotherapy. If one clings to Babinski's narrow views, one will limit the use of suggestion to the elimination of pithiatric symptoms, which can be simulated by the will. Moreover, it is difficult to dispute that suggestion is often effectual against physical pain, which is a phenomenon which cannot be produced by the will. In answer to this fact, there is one resource always open to Babinski's school—to state that the pain has disappeared, not owing to the belief in its disappearance, but in virtue of an inhibition following an emotional shock. Thus their theory remains intact. We have already stated that at present it is impossible to stop this particular bolt-hole.

Let us now pass on to the reductive methods. They exhibit a complete change of technique. The prospective methods are purely symptomatic. They aim at ridding the patient of a symptom, without countering the causes of that symptom, of which they are usually ignorant. This is clearly a great weakness. Let us take the case of a child exhibiting nocturnal enuresis. He can be cured of his disorder either by a change of his emotional environment, or by direct suggestion. A girl of seven or eight had been accustomed, since her earliest childhood, to wet her bed at least twice a night. Her parents had called various eminent medical practitioners into consultation, without the slightest result. Having met the family during the holidays, I offered to try suggestion. They accepted. The girl, after proper instruction, repeated to herself twenty times before going to sleep that the next morning she would wake up to find her nice little white bed quite dry. As soon as she was asleep, I repeated the same suggestion to her. The first three nights she remained absolutely continent; on the fourth there was a relapse, but on the fifth her bed again remained dry. Owing to the departure of the family, I could not carry the experiment further. Later I heard that the parents had tried to continue the process of suggestion at home, but without any success. Yet this short therapeutic attempt is instructive. It shows us that suggestion contends with the symptom blindly, in utter ignorance of its causes. Why did this girl wet her bed? Why did suggestion fail on the fourth night, and after her return home? I cannot tell.

The reductive methods, whether in the form of Breuer's catharsis or Freudian psycho-analysis, do in fact attack the causes of the disorder. They aim at destroying them. Once this destruction has been carried out, mental synthesis is automatically re-established. We

may therefore say, in a very true sense, that all psychotherapeutic methods achieve cure by synthesis. The difference between the two main groups lies in the fact that the so-called synthetic methods re-establish the synthesis directly and artificially, whereas the so-called analytical methods simply destroy the obstacles to the re-establishment of the synthesis, and leave the reconstitution of the latter to nature, so far as it is determinately governed, and to the free choice of the patient, so far as it is not. This is of vital importance. It is essential to realize that the purely analytical process tends only to cure, not to educate. Fundamentally, Freud aims merely at replacing an unconscious, neurotic conflict by a conscious and human conflict.¹ The solution to be given to this conflict is outside the province of psycho-analysis. It may depend upon a general conception of the universe, in which case *it must be resolved by the patient alone*. As Anna Freud, the daughter of the savant, so exactly says:

At the end of the analysis of an adult, we do not force any patient to cure himself. What he will do with the new possibility open to him, depends upon himself. He may either return to the way of his neurosis, or, if the development of his ego permits, follow the opposite road, which leads to the full satisfaction of his inclinations, or even, if he can contrive to do so, follow the *via media*, i.e., make a synthesis of the two potentialities within him.²

That which, in fact, differentiates analytical psychotherapy from the education of the will is that the latter attempts to promote good use by the liberty of the *psychic possibilities already to be found at their normal level*, whereas the aim of analysis is to restore to their normal level psychic possibilities which have been dynamically disordered. It cannot therefore be claimed that psychotherapy and education are rivals. Psychotherapy aims at restoring a determinist level of psychic synthesis. This level is strictly sufficient to define psychic health, but by no means sufficient to define the whole human good. Once his psychic capacities have been restored to their normal state, each individual will make what use of them he thinks fit in terms of his *Weltanschauung*. The appreciation of this use depends upon morality.

We observe that psychotherapy lies between physical medicine and morality, and that it runs the risk of arousing disputes of jurisdiction on both these frontiers. Baudouin has given an admirable exposition of this fact:

¹ I. L., p. 363.

² Anna Freud, "Introduction à la psychanalyse des enfants," in *Revue de Psychanalyse*, vol. v, No. 1, p. 83.

To remedy depression [he writes] is much the same as increasing the *psychological stock-in-trade*. Different techniques will, of course, be suitable to achieve this, according to the level at which the causes of the depression are to be found. To combat causes of a physical order, one will have recourse to medicine. To correct the attitude of the conscious mind, on the contrary, is the role of education, religion, or philosophy. That is clear; it is no new point—but that is no reason why it should be forgotten. But here is something more novel and more subtle. In proportion as the discovery of the “unconscious”, that zone mid-way between the conscious mind and the organism, went forward, there appeared a figure midway between the physician on the one hand, and the director of conscience, the philosopher and the educator on the other. This figure, neither “fish nor flesh”, placed somewhat uncomfortably between the two stools, is the psychologist, the psycho-analyst, the man (whatever name belongs to him or we choose to call him) who makes of the “unconscious” his study and his privileged field of action. This newcomer is sometimes the object of bullying on the part of his two neighbours, who sometimes harshly repel him, sometimes claim his territory as part of their jurisdiction.¹

After having pleaded psychotherapy's right of existence, Baudouin adds:

But on the other hand, it is quite true that the physical organism, the unconscious and the conscious mind are closely interlinked, and that, in most cases of simple depression as well as of established neurosis, all three must take a share of the responsibility. Thus not only do the three sorts of rectification remain legitimate (as against those who claim that their own particular technique is a panacea), but there will usually be occasion to make use of them in conjunction. Since therefore specialization runs the risk, here and now and still more in the future, of taking root in these spheres, it would at least be highly desirable if the specialists of the moral, psychological and medical techniques could live in close harmony and constant collaboration.²

In order to achieve this harmonious understanding, it is essential to realize that whereas morality and medicine often trespass upon the domain of psychotherapy, psychotherapy trespasses no less frequently upon the domains both of morality and of medicine. There are four types of frontier violation which we shall discuss in turn.

The first type consists in regarding as matters of morality what are actually matters of psychotherapy. Too many uninitiated people attribute the neuroses to lack of will-power.

¹ Baudouin, M. E., pp. 34-5. Italicized in the text,

² Baudouin, M. E., pp. 35-6.

This ignorance of elementary psychological facts [writes Dr. Forel] claims many needless victims. In the name of the will, the neurotic struggles, fights and clutches at planks like a ship-wrecked sailor; the more he struggles, the more exhausted he becomes; he exhausts himself through obstinacy of will. Never has lack of will-power been the cause of a neurosis (for it is but the symptom thereof), and efforts of will cannot cure it. A neurotic suffering from agoraphobia who succeeds, after a week of desperate attempts, in crossing the public square which he has avoided for years, will not thereby be cured. He wanted to prove to himself that his will was still sound. He continues his struggle; his obstinacy is sheer loss, and he wastes thereon an energy which would be much better employed in other directions. What, moreover, is the use of this unequal struggle, since treatment will rescue him from the grip of his neurosis?¹

In pointing out the mistake whereby cases actually relevant to psychotherapy are treated as relevant to morality, we do not mean to deny that the factors of moral or religious order may accidentally exert a successful psychotherapeutic influence.

The second type of mistake consists in believing that psychotherapy can solve the entire problem of human conduct. The psychoanalysts fall rather easily into this mistake. Yet they have thrown greater light on the strictly determinist character of psychotherapy than the therapists of the other schools. Their deficiency lies in not having clearly recognized that beyond the problem of psychic health there lies the problem of man's destiny. It is no doubt untrue to maintain that a discipline can only be defined in terms of its neighbouring disciplines. It is absolutely certain that psycho-analysis can be defined in itself, without any attempt to establish it in relation to morality. But it is no less true that since the relations between psychotherapy and morality depend upon the essential nature of these two disciplines, a false idea of these relations must implicate the very concepts of psychotherapy and morality. It is quite inadmissible that one should try and run a contraband trade in metaphysical or moral conceptions, under the flag of mental hygiene. One may, if one will, be either a utilitarian or a hedonist, but to be either *one must expressly declare oneself a philosopher*. A recent article by Dr. de Saussure seems to us calculated to countenance the worst possible confusions in regard to the question we are discussing.²

Our readers will not have failed to observe [he writes] that we

¹ O. L. Forel, *La psychologie des névroses*, pp. 230-1.

² de Saussure, "Les bases d'une hygiène mentale individuelle ou l'étude des normes en psychothérapie," in *L'Hygiène mentale*, thirtieth year, No. 1, January 1935, pp. 1-20.

have made no allusions to the concepts of obedience, will, energy, and self-confidence, with which so many treatises of morality, education, and psychotherapy are full. This is because these concepts form the basis for a morality of maladjusted persons. They are a plaster cast applied to a wooden leg. The true therapeutic method should aim at making the character normal, and not at artificially compensating for the defects. Obedience is the morality of those who are not yet independent, and are afraid of their liberty of thought and action. It is the rule of conduct for those who become anxious at the slightest disagreement with another, and who, in order to win their neighbours' assent, which they could not do without, adopt blind obedience. Will and energy constitute the morality of those who are fettered by their inhibitions. Their activity does not spring freely from their feelings. They do not possess that spontaneous outburst of life which makes them grasp as much reality as they can, and enjoy it. Self-confidence is the morality of those who are overwhelmed with inferiority feelings. All these therapeutic systems are only compensatory activities. They have the same value as a sedative one might prescribe for a sufferer from insomnia, the causes of whose condition one had not first ascertained.¹

Let us define our criticism exactly. We do not blame Dr. de Saussure for saying that energy and will have no place in *psychotherapy*. We have sufficiently defended that thesis in the foregoing pages. But we do blame him for having attempted to swallow up morality in psychotherapy, and for thus coming to maintain that energy and will have no place in the *total* conduct of the normal man. However normal a man may be, however altruistic we may suppose him to be, when he finds himself so placed that he must choose between his life and the general interest, he will need both energy and will in order to sacrifice his existence. There is no technique for the making of heroes.

The frontier between psychotherapy and medicine is the scene of as many "incidents" as that between psychotherapy and morality. The third type of error that we have to investigate consists in the attempt to claim for medicine cases which can only be effectively treated by psychotherapy. We shall give a summary of a case-history which very clearly illustrates how, by failing to recognize the concept of psychological determinism, one may alternate between morality and physical medicine, between the first type of error and the third.²

¹ de Saussure, Art. cit., p. 19.

² Nolan D. C. Lewis, "A Psycho-analytic Study of Hyperthyroidism," in *The Psychoanalytic Review*, vol. x, No. 2, April 1923, pp. 149-54.

The patient X, an unmarried stenographer of twenty-three, exhibited nothing of particular interest in her family history. She had had the usual childish ailments.

X had always been very much devoted to her father, but always on bad terms with her mother and sister. At the age of five, she had once said, on coming home, that her father was talking to a neighbour's wife and kissing her. This deliberate lie had caused a fairly long-standing tension between her parents.

Menstruation started at the age of thirteen, but had never been normal. X had no serious illness until she was eighteen, at which age she became a stenographer.

It was then that she began to suffer from palpitations, insomnia, and a feeling of stiffness in the neck. These symptoms grew worse for the next three or four years, and there also occurred a symmetrical swelling of the thyroid gland, and occasional digestive disorders.

Several physicians advised thyroidectomy. One of them sent the patient to consult Dr. Lewis, who observed a marked tremor, slight exophthalmos, dilated pupils, an enlargement of the thyroid gland, generalized muscular tension, a pulse varying between 120 and 160, a slight systolic murmur, and a slight increase in the blood-sugar.

Mentally the patient was incapable of concentration; she was irritable and suspicious; she felt "as if the people in the street were specially looking at her." She also suffered from insomnia, and from abnormal terrors, and experienced terrible dreams. Shortly after this consultation, a very well-known surgeon performed bi-lateral thyroidectomy. X had been told that her symptoms would progressively disappear, but since a year after her operation her condition had not altered, she again consulted Dr. Lewis. After a more detailed investigation of the patient's history, he decided to undertake psycho-analysis.

The first dream was very enlightening: "A man was holding me in his arms and kissing me. I made only a weak resistance. But I tried to keep fast hold on my moral code, which told me I was doing wrong."

For the last two years, the patient had been passionately in love with a man twenty years older than herself. He reminded her of her father from several points of view. She was working in his office, and had the greatest difficulty in the world to prevent herself from seizing his hand, or giving way to other sentimental demonstrations. These inhibitions prevented her from concentrating, and contributed towards her condition of muscular tension and tremor.

Further investigation showed that the man she loved was merely

a father-substitute, and this fruitless love was destroyed by a full understanding of its mechanism.

The patient then revealed that her whole life had been dominated by the need for heterosexual love. She complained that men paid no attention to her. She attributed her failure to her unattractive looks, and especially to the unhealthy appearance of her skin.

Here is a dream connected with this theme. "Two girls were sitting before a window. One seemed fully dressed; the other was very lightly draped in floating gauze, so that her limbs could be seen. Her expression was tender and charming; her skin was exceptionally white, and quite flawless."

Lewis (who does not give his patient's associations) believes that the two girls of the dream represented respectively his patient as she really was, and as she would have liked to be.

The following dream gives the clue to the whole situation:

I was hanging onto the prow of a rowing-boat, and someone was trying to row it to the bank. I saw a crocodile, or an alligator, half submerged. I cried out and tried to escape, for it was coming straight at me, splashing through the water. I seemed to be a little girl, and I was almost petrified with fear.

During the analysis of this dream, the patient recollected a memory of childhood. At the age of five—"certainly not more than seven"—she had been induced to perform mutual masturbation by an elder brother. Later two other boys joined them in these practices. They often told her that she must keep absolutely quiet about it, or she would be severely punished. Later she became alarmed, and dropped the boys.

The adventure in the water reminded her that at the age of ten or eleven she had often gone bathing or canoeing in a little river with other children. During one of these outings, her brother took her off into some bushes beside the river to have coitus with her. This happened several times, but she was always afraid of completing the act. It was not till she was thirteen that she managed to resist him. The crocodile in the dream represented her brother wanting to carry her off to the bank and play with her sexually.

These experiences aroused in X an extremely violent impulse to masturbation, to which she became periodically addicted for more than ten years. As she grew older, her shame increased, and she tried to break herself of the habit. Throughout this period the symptoms of hyperthyroidism, anxiety, and night terrors grew gradually worse.

The patient began to despair, and sought the help of religion.

Protestantism, in which she had been brought up, seemed to her to offer too ill-defined a moral code. She therefore became a Catholic, hoping that she would be able to rely on definite moral vetoes, and that confession would help her. For some time she succeeded in refraining from masturbation. Her state of tension became so great that she was frightened of losing her reason. As a child, her mother told her that masturbation might lead to madness.

This fear of becoming insane was intensified by two hallucinatory visions of herself, which occurred at a fortnight's interval in the same circumstances. Going into the bathroom as soon as she was awake to do her hair, she saw herself standing in front of the mirror. Later, during analysis, the same experience occurred, but this time, since its mechanism had been explained to her, her curiosity and amusement were stronger than her fear. Having gone one morning to answer the telephone, as she was going back to bed, she met herself, with her hair down and wrapped in a dressing-gown. The experience has not been repeated in the last two years.

Her general condition had not altered appreciably, but she had succeeded in refraining from masturbation until an occasion when she allowed a married cousin to embrace her. The heterosexual impulse thus being added to the autoerotic, the situation became intolerable. It was then that thyroidectomy was performed, after which the patient's condition was as bad as ever. She was able to give up masturbation, but the heterosexual impulse was so violent that the patient was sure that all the men she met must realize her condition.

The following dream is an allegorical illustration of the psychic conflict taking place in the unhappy girl's mind. "A little mouse came towards me; I struck at it, to frighten it or kill it, but it grew, and changed first into a lion, and then into three lions which bounded madly round the room."

Dr. Lewis (who here again does not quote the associations justifying his interpretation) thinks that the mouse represents the patient's infantile sexuality, which, having been unsuccessfully resisted, grew into three principal components—masturbation, incest, and heterosexual impulse.

After the various ætiological factors had been analysed, understood and accepted, both the mental and physical condition of the patient showed a striking improvement. The pulse-rate, which for several years had never been lower than 120, dropped to 78 in one afternoon. The muscular tension yielded so rapidly that an orthopædist diagnosed acute relaxation of the ligaments of the foot, which required bandaging for several days. The blood-sugar became nor-

mal, and gastro-intestinal balance was restored. The amorous attraction towards the "father-substitute" was sublimated in University studies. The patient's abnormal fears and inferiority feelings disappeared. Her capacity for mental effort improved, and she became capable of disposing of her sexual impulses on the intellectual plane, without conflict. More than a year after the analysis no relapse had occurred.

I have chosen this case because it clearly shows that psychological determinism is irreducible either to morality or to medicine. The patient began by treating her disorders by moral and religious means, and achieved one moral result—the cessation of masturbation—but from the point of view of both her physical and her psychic health, the result was nil—in fact, serious personality disorders (hallucinations of seeing herself) actually made their appearance. Then X went to the other extreme and sought the aid of the most crudely physical of all forms of treatment—surgery. Still the result was nil. Steps were at last taken to have her treated by psycho-analysis, which cured her.

Critics must be good enough not to represent us as saying that morality and surgery are useless. Morality is very useful in moral cases, and surgery in surgical cases. But still we must admit that in psychological cases there is nothing more truly to the purpose than psychology.

We have still to discuss the fourth type of error which consists in attempting to claim for psychotherapy what is actually the province of medicine. Christian Science carries this tendency almost to insane lengths. Its votaries go so far as to deny that physical disease has any reality. Without going so far as this, some of the Freudians prejudice psycho-analysis by attributing an unlikely importance to the psychic factors in the ætiology of such diseases as cancer and tuberculosis. There is lastly a more subtle form of error, of which first-rate physicians are sometimes guilty, upon which we think we may usefully dwell. When clinical investigation and laboratory methods have revealed no organic cause, they consider themselves entitled to conclude that the subjective symptoms exhibited by the patient are strictly psychogenic and curable by psychotherapy. This dual conclusion would only be correct if the actual techniques of exploration furnished an *exhaustive* knowledge of the patient's physical condition. Now it is all too clear that medicine is no more perfect than any of the other sciences. We must therefore carefully distinguish the inability to discern an organic cause from the right to assert that the disorder under investigation is psychogenic and curable by psychotherapy. Mackenzie has very rightly stressed the fact that

many organic diseases exhibit an exclusively subjective symptomatology in the early stages. He correctly complains of the neglect of early subjective symptoms by traditional semeiology. If such symptoms were better known, diseases could be diagnosed much more quickly, which allows one to presume that they might be treated much more efficaciously.¹ Mackenzie is only concerned with the early diagnosis of organic diseases through closer investigation of the subjective symptoms. It would clearly be interesting to extend the problem, and to inquire whether the investigation of subjective symptoms would enable us not only to establish a differential diagnosis between specific organic diseases, but also to know whether one is dealing with disorders of predominantly psychic or predominantly somatic ætiology. The systematic study of the criteria for establishing preponderance of psychogenesis does not seem to have stimulated research. Hitherto we have generally been content with empirical rules; we know, for example, that obsessional neurosis lies in the province of psychotherapy. In order to treat the problem of the indications of psychotherapy in a really scientific manner, we should have to inquire whether, assuming the preliminary condition that the physical examination has been negative, there are psychological criteria enabling us to assert the preponderance of psychogenesis *for the illness as a whole*. We have seen, indeed, above that the positive psychic symptoms of mental diseases of organic ætiology yet possess a psychogenesis. But that does not render them any more accessible to psychotherapy. The problem amounts, in short, to the question whether it is possible, by the use of purely psychological criteria, to distinguish a fall of mental level, induced by causes which are organic, but inaccessible to physical investigation, from a strictly dynamic disease resulting exclusively from phenomena of external or internal inhibition. In a very interesting work entitled *La psychogenèse des délires*, Dr. de Greeff has insisted on the importance of not limiting the study of chronic hallucinatory psychosis to a consideration of its terminal dementia.² By the systematic application of appropriate tests, he has brought to light an intellectual deficiency of much earlier date than the orthodox psychologists believed. Since this deficiency is general, it may plausibly be attributed to organic causes rather than to the generalization of an inhibition. Dr. de Greeff's work is an excellent example of somatic disorder inferred by purely psychological means. From the point of view that interests us, he has made a valuable contribution to the

¹ Mackenzie, *The Future of Medicine*.

² De Greeff, "La psychogenèse des délires," in *Journal de Neurologie et de Psychiatrie*, vol. xxxi, pp. 361-421, 441-71.

study of the psychological counter-indications of psychotherapy. It seems that the knowledge of the psychological indications thereof is in a very backward state. We mentioned above Dr. Lacan's very important researches on comprehension as a criterion of psychogenesis. They are unfortunately not sufficient to resolve the problem before us. It will be the business of research workers of the future exactly to determine the psychological criteria of the indication and the counter-indication of psychotherapy.

In the foregoing pages we have tried to distil the essence of psychotherapy, and we have sought to define its boundaries. We shall now, in order to give a concrete idea of the course taken by treatment of an analytical type, finish our account of the case-history of our patient Adolphe, whose *Œdipus* complex we investigated at some length in the previous chapter. The reader will remember that we interrupted this case-history at the sixth session, immediately after the bringing to light of the *Œdipus* fixation.

At the seventh session, Adolphe told me, on arrival, that "it was not going too badly." We investigated the role of his mother-fixation in the genesis of his timidity of women. At the eighth session, Adolphe recounted the following dream. He was in a car, driven by a woman; he was arguing with her husband, and was afraid the woman might drive into the ditch. Being in a car with a woman made him think of his ex-mistress; they had often exchanged kisses and embraces in taxis. I pointed out to him that it was the woman who was driving—still the same symbolism of deficient virility. The woman with a car made him think of the landlady of the hotel where he spent his holidays. She was rather pretty, had two children, and did not seem to get on well with her husband. Adolphe had been rather attracted by her. The husband made him think of the fiancé of the girl with whom he had been when the fire broke out (third session). I pointed out to him that the dream indicated, besides deficient virility, a tendency to normal male aggressiveness, since he was arguing with the husband. I told him that he must have thought of winning the girl in question in defiance of her fiancé. He agreed. I then told him that during the course of analysis one should not take any serious decisions involving one's future, because of the emotional upset due to treatment. He would do better to husband his growing strength for some serious enterprise. He acknowledged this. At the ninth session, while still complaining of disturbed sleep and various kinds of headache, especially when walking, Adolphe told me that he was gaining courage. He had noticed a little newspaper-seller, and had been quite bold with her, but she had ceased to attract him when he saw her again accompanied by some little boys.

He then told me two dreams which he had dreamt during the week which had passed since the previous session. The following is the older in date. Adolphe was out shooting; his companions wanted to fire before him; he would not let them, and fired first, killing a large number of pheasants. He himself commented that this dream showed that he was regaining courage. Shooting reminded him of the landlady of the hotel, whose husband used to go shooting. Game reminded him of women; he had gone "hunting" with a friend on the boulevards, but only for some fun. The more recent dream was still very clear. He was talking politics to a girl, then, finding that boring, he began to talk of love, put his arm round her waist and kissed her, and suggested a meeting which she accepted. Politics made him think of his former friend, the girl of the fire; he often thought of her, and would be glad if she left her fiancé. The kiss reminded him of his ex-mistress, and of the niece who looked so like her. The two dreams were clear evidence of progress. We reviewed the situation. Adolphe was taking up a more normal male attitude towards women. He could now think of his mother and grandmother, he told me, almost without emotion. There still persisted, however, a certain timidity towards women, exhibited on the one hand by his taste for little girls, on the other by his other taste for women older than himself, who must make all advances. Lastly, he had not freed his affections from the girl of the fire, nor had he rid himself of his love for his ex-mistress. All this would disappear if he could fall in love with some good woman. Meanwhile, he would be very ill-advised to wound his affections in fruitless adventures.

At the tenth session the patient brought me no dreams. We spoke of his headaches. He told me that at Baujon he had been advised to have a turbinate bone operated. I consequently arranged for a consultation with an ear-nose-and-throat specialist. While we were dealing with this topic, Adolphe told me that he had only a tenth of the normal vision. He would therefore also have to go to consult an oculist. At the eleventh session, the patient told me that he had consulted the ear-nose-and-throat specialist. Dr. Labarraque had given him treatment. Immediately afterwards, his headache had ceased, only to reappear in the afternoon. He explained to me that he felt a dull pain on the top of his head, and that when talking to me it passed to the sides and became more acute, but more bearable. It was as if someone were pulling his hair. He then told me a dream. He was in the street, and accosted a girl, went with her into a shop, and there embraced her openly. His associations brought him back to his ex-mistress, and to the girl of the fire. I concluded that this dream showed that he was becoming steadily more virile, but that

his fixation on his ex-mistress persisted. Except for the headache and some slight insomnia, all was going well. Adolphe told me that he was still smoking twenty cigarettes a day.

At the twelfth session, Adolphe told me that he was still continuing his nasal treatment, but that he had not yet gone to see the oculist. Both his headaches and his sleep had improved. The night before, he had gone to bed at one in the morning, having been to a cabaret. He could not remember exactly the dream he had dreamt. He first told me that he had been with some people who had tested his brain to see whether he was not going mad, that he had always found one of them barring his way, but that he had at last managed to escape. The associations on this dream brought him back yet once more to his ex-mistress; he had imagined that she wanted to provoke his jealousy, to put him to proof; he had once read a story of this kind. The cabaret-singer had drawn an allusion to madmen. I pointed out to Adolphe that his associations were almost wholly concerned with women, whereas the dream only dealt with men. He then remembered the beginning of the dream. He was being chased along a boulevard by some men; he had turned round and fired a revolver shot at one of them, who fell down. This made him think "of pimps and girls." He told me of scenes of jealousy with his mistress; the idea of killing her had sometimes passed through his mind. At this point I told him that I did not like his dream, because of its opposition to the sequence of his cure-foreboding dreams. In connection with "pimps and girls," he told me that he had felt a sort of attachment for a prostitute on the streets. She had accosted him. He had repulsed her, and then had gone back. She had slept with him for eighty francs—satisfactory coitus, such as he had never yet had with prostitutes. She reminded him of his mistress. He had wanted to see her again. She had given him the names of the hotel and the café she frequented. He did not like the café, and had been afraid of her pimp. I commented that this incident showed that his sexual potency was restored, but that the adventure led him nowhere. What he needed was a good woman and a regular life. He admitted that in his extremely sensitive condition, he sentimentalized à propos of nothing. I told him that without wanting to read him a sermon, I thought it better that he should not waste his partially recovered powers.

At the thirteenth session, the patient told me that Dr. Labarraque had finished his nasal treatment. He was now wearing the glasses which Dr. Dubar had prescribed for him. His sleep was still uneven. His headaches had been "rather better" during the past week, according to his first statement, but later he corrected this to "much

better." His emotional condition was still the same. He had not paid another visit to his prostitute; it was too expensive. He had revisited his family doctor, explained his treatment to him and told him of the results achieved. Of his own accord, he suggested that in future he should only come to see me once a week, instead of twice, as he had often done hitherto. The fourteenth session was very short, the patient asserting his improvement even more emphatically. I gave him an appointment in a fortnight's time. At the fifteenth session, the patient told me that he had been "quite well" lately, but that for the last three or four days he had again had headaches and disturbed sleep. We tried to find the reason for this. He first mentioned the financial crisis, which was affecting him just as it was everyone else; then he told me that he had changed house, and that he had then re-read the letters of his ex-mistress. I pointed out that this was undesirable reading-matter for so emotional a person as himself. The patient was then examined by Dr. Borel, who told him to come back in two months' time if all went well—sooner, if anything went wrong.

Two and a half months later, Adolphe came and reported that he was doing well. Since our last session, his condition had continued to improve. It seemed that he no longer had headaches or disturbed sleep. He still complained of being rather hyperemotional, and appeared to have had occasional abnormal sensations. From the sentimental point of view, a possibility of marriage with a girl had failed for material reasons. Then Adolphe went to report to Dr. Borel.

Adolphe's case and its treatment seem to us to call for some comment.

This case-history very clearly illustrates the need to reinforce the clinical aspect by the psycho-analytical. Regarded from the clinical point of view, Adolphe is an anxious or a psychasthenic patient with abnormal sensations; his case is dull and commonplace. As soon as the psycho-analytical method is applied, the case completely changes its aspect, and reveals a very serious psychic conflict based upon conscious and late incestuous tendencies. Deep investigation is necessary, not only to understand Adolphe's neurosis, but also—and primarily—to treat it successfully. The clinical diagnosis leads to the use of the standard sedatives; now his family doctor, in the letter recommending the patient to the clinic, observes that "his condition does not seem to be much improved by the usual sedatives." Moreover, although the injections of calcium chloride effect the disappearance of the more obvious abnormal sensations, they do not show much ability to deal with the anxiety. Synthetic psychotherapy, which

would not have brought to light the incest complex, would probably have only achieved a partial result. One may ask oneself how the case would have evolved, had analysis not intervened. Would not the patient's guilt-sense have risked giving rise to complications which could not have been clinically foretold?

Adolphe's Œdipus complex is quite atypical, owing to the fact that it was both late and conscious. Our choice of it as an example was governed by our didactic aims. Early, unconscious Œdipus complexes lead to endless dispute. It is therefore necessary to begin with a case which must carry conviction, unless one is prepared to deny the actual material truth of the facts.

Adolphe's treatment was not strictly orthodox. I never made him lie down, and from the beginning, I only gave him two sessions a week. This method seems to me to result in forms of transference very different from those we find in an orthodox psycho-analysis. Adolphe had no transference dreams.

It should be observed, on the contrary, that the whole of Adolphe's treatment was based on dream-interpretation, which is the very essence of psycho-analysis. The patient dreamt eight dreams in the course of our fifteen sessions. These dreams were very remarkable for the clarity with which they enable us to follow the development of the neurosis. Let us consider them in turn. In the first dream, Adolphe was piling trusses of hay with a friend; fire broke out and they escaped (third session). This dream led to a series of memories with one common feature—timidity of women. The second dream manifests this timidity more directly: Adolphe is in a class of boys superintended by a woman (fourth session). In the third dream, Adolphe finds himself with a girl wounded in the left hand; he turns into a doctor and tends her (fifth session). In this dream we can trace the outline of a more normal attitude towards women—an attitude which seems to find an excuse in the woman's wound. During the course of this session, Adolphe confessed his incestuous tendencies to me. In the fourth dream, Adolphe is in a car driven by a woman—another symbol of deficient virility—but he is arguing with her husband; he is therefore bold enough to compete with a man for a woman (eighth session). The fifth dream expresses the recovery of a virile attitude by a typically Freudian symbol; Adolphe is shooting; his companions want to fire before him; he will not let them, fires first, and kills a number of pheasants (ninth session). In the sixth dream, Adolphe's all-conquering virility takes no more pains to adopt a disguise, and asserts itself in the most direct manner: Adolphe is talking politics to a girl, then, finding that boring, speaks to her of love, puts his arm round her waist, kisses her, and makes a

date with her, which she accepts (ninth session). The seventh dream shows that Adolphe is not afraid to assert his new attitude in public: he accosts a girl in the street, goes into a shop with her, and kisses her openly (eleventh session). The eighth dream, which follows a satisfactory heterosexual achievement, seems to mark a kind of relapse: Adolphe is chased by some men on a boulevard, he turns round, fires at one of them, and brings him down. His brain is tested to see if he is not going mad; someone always bars his way; at last he manages to escape (twelfth session). I do not claim to have analysed this last dream in anything like a satisfactory manner. A number of questions occurred to me in connection with it which have remained unanswered, since the case continued to make favourable progress.

Lastly, there is one aspect of Adolphe's treatment upon which we must forestall an unlikely, but possible misunderstanding. Some people might think that his relations with the prostitute constituted a factor in the treatment. This would be to make a serious mistake. Psycho-analysis effects its cure by restoring to the patient, by means of a purely psychological technique, the *possibility* of using his instinctive powers in the direction he chooses. The use he makes of this possibility presupposes the cure, and cannot therefore be its cause. Treatment consists solely in dispersing the painful traces left in Adolphe's psychism by his incestuous tendencies, and in making it possible for him to develop normal virility. So far from advising Adolphe to have sexual relations with prostitutes, I told him several times that such experiences were quite meaningless, and that he would do better to husband his strength and keep himself for a good woman with whom he could enjoy a lasting union. In giving this moral advice, I actually went outside the province of psychotherapy. I think that one can sometimes do this without risking pathological consequences, so long as one limits oneself to suggesting a very indefinite line of conduct in a purely optional manner.

The falsity of the statement that analysis cures patients by making them practise coitus is clear when one remembers that the typical case of psycho-analytical treatment is that of psychogenic impotence. It would therefore be contradictory to maintain that inability to practise coitus was cured by the practice of coitus. The treatment of frigidity in women affords the same proof, in perhaps a more interesting form. Whereas in man the ability to accomplish the genital act and to enjoy it are generally linked,¹ women, owing to

¹ Orgasm without pleasure may, however, be found in persons with normal erection and ejaculation, cf. *Revue de Psychanalyse*, vol. vi, No. 1, pp. 101-2, Dr. Schiff's intervention. (D.)

their passive role, may practise coitus without finding it at all pleasurable. Psychogenic frigidity is also a typical case within the jurisdiction of psycho-analysis. We are therefore forced to conclude that analysis effects its cure neither by coitus in its motor aspect, nor by coitus in its pleasurable aspect.

I shall now quote, in support of the foregoing statements, a personally observed case-history of frigidity cured by a form of analytical psychotherapy.

A doctor friend of mine asked me to conduct a psychological examination of a woman aged about thirty, who complained of frigidity. He had examined her from the organic point of view, and had found nothing abnormal.

At the first session I closely questioned the woman—whom I shall call Lucie—on her exact feelings during her relations with her husband. She was clearly well disposed to confide in me, but had very little experience of analysing her states of mind, so that she confused sensation and emotion. I nevertheless contrived to make out that she felt for her husband an affection which contained a very small sexual element; she submitted to coitus in order to please him, but experienced at the most no more than a beginning of genital sensation. She had never once reached orgasm. More than ten years of married life, and a number of child-births, had not made the slightest alteration in this state of things. Lucie told me that the occasion on which she had experienced most sexual excitement had been during a dream of a dog, and that a dog had also once greatly impressed her during the waking state. Uneasy and dissatisfied, she had sought consolation in religion. She confessed to me, with some hesitation, that she had felt “an absurd schoolgirl’s infatuation” for her confessor. Lucie’s frigidity had caused rather a tense atmosphere in the home; one night her husband lost patience, and suddenly drove away from the house. Her confessor, uneasy at the turn taken by the emotional relations between Lucie and her husband, tried to influence his penitent by advising her “to be kind to her husband.” The result of his interference had been nil. Lucie remained as frigid as ever. All this seemed to me rather ominous, and I told Lucie that in my view she ought to consult a psychiatrist. I was about to close the interview, when, struck by Lucie’s evident good will, I asked her to tell me the most painful memory of her childhood. Her face fell, and she remained silent for a few moments, then, speaking with an effort, she told me the following story. At the age of thirteen or fourteen, she was travelling one night by train with her father and half-brother. She had been to sleep. Suddenly she woke up; her half-brother was leaning over her and caressing her breasts. He

begged her in a whisper not to wake up their father, who might easily have killed him. Lucie had never told anyone this experience, not even her confessor. I explained to her that such an initiation into sexuality, in the form of an attempt at incestuous assault, was likely to have aroused in her a deep-seated and generalized disgust, extending even to the most legitimate forms of sexual activity. Lucie had told me during the session that she disliked her husband's physique, which was short and fair, and that she was only attracted by tall, dark men. I asked her what was the physique of her half-brother; she told me that he was tall and dark. My question disturbed Lucie, who wanted to know if I thought that her partiality for tall, dark men had been due to her half-brother. I told her not to torment herself with that possibility for the moment; we should investigate it later. Lucie asked me whether she ought to tell her husband what had passed during this first session; I told her that I did not think it advisable.

On the day fixed for the second session, Lucie came with her husband. I first had an interview with the latter, who said that Lucie had told him everything. This confidence had considerably improved the state of their relations, which had ended in sexual intercourse; the husband, having ejaculated rather quickly, had rubbed his wife's clitoris with his hand, and she had reached orgasm. I then saw Lucie, who confirmed every detail of her husband's story. It should be observed that he had already attempted friction of the clitoris previously, but without success.

Both husband and wife again arrived together for the third session. I first interviewed the husband, who was in despair. In the interval between the two sessions, he had wanted to have sexual intercourse with his wife. Lucie, who was tired that evening, answered that she would rather not. Then her husband had said: "You're still in love with your half-brother." During the coitus which followed, Lucie had not experienced the slightest trace of pleasure. Lucie herself later told me the same story, and I cheered her up as best I could.

At the fourth session I learnt that Lucie had reached orgasm actually during coitus, without the aid of manual friction of the clitoris. She had been so delighted with her sensation, that she had asked her husband for sexual intercourse again during the same night. Averting her eyes and blushing, she said: "I would never have believed that it could be so nice." Her repugnance for her husband's physique had disappeared. I then told Lucie that I thought that my part was over. I heard of her a year afterwards; she was reaching orgasm in her relations with her husband at irregular intervals.

This rapid cure of a long-standing frigidity clearly shows that the essence of analytical treatment is the transformation of the unconscious into the conscious. Here the trauma responsible for the frigidity was perfectly conscious, which was not so of the causal relation between the emotional shock at puberty and the psycho-sexual inhibition. We may distinguish four levels of factors in the ætiology of a psychoneurotic disorder: (i) constitutional factors, (ii) acquired somatic factors, (iii) acquired psychic factors, (iv) social factors. Psycho-analysis, regarded in its essential nature, only deals with the third group of factors, those which preserve the imprint of the past in the form of an unconscious memory. A change in the circumstances of the patient's life may often be advisable as a result of psycho-analysis, but the therapeutic action of the analysis is not based upon this. It is really astonishing that so eminent a psycho-analyst as Frink should have expressed the following opinion on this subject:

It is, I think, now quite generally understood [he writes] that psycho-analysis cures not so much through its leading patients to know in detail why they are sick, but through the changes and readjustments in their lives which they are enabled to make in the light of this knowledge.¹

If changes in the social situation are implied, Frink's formula is the absolute negation of the specific character of psycho-analytical treatment. It is only acceptable if it implies endo-psychic changes alone.² Let the reader refer to the case of Lucie. Her social environment remained exactly the same, but her psychism was modified. Her husband obviously did not change his physique, but her repugnance for that type of physique disappeared. "Our therapy," writes Freud, "does its work by transforming something unconscious into something conscious, and only succeeds in its work in so far as it is able to effect this transformation."³

¹ Frink, M. F., p. 258.

² In his last chapter, Frink has himself given an admirable explanation of the mechanism of endo-psychic modifications brought about by analytical treatment. Frink, M. F., pp. 301-38.

³ I. L., p. 237.

CHAPTER VI

PSYCHOANALYSIS AND THE SPIRITUAL LIFE

The movement started by Freud has in the course of time expanded into something very like a world system. In the foregoing chapters we have dealt almost exclusively with the scientific aspects of psycho-analysis. We must now define our position with regard to the philosophy proceeding from it. This is to be our aim in the present chapter, which will be divided into four sections: (i) Methodology, Psychology and Philosophy; (ii) Two Conceptions of the Spirit; (iii) Psycho-analysis and Spiritual Values; (iv) Conclusion.

I. Methodology, Psychology and Philosophy

In the course of this work, we have constantly emphasized the need for distinguishing psycho-analysis from Freudism. We came to the conclusion that this division was insufficient. When we were discussing the methods of investigating the unconscious, we suggested a triple division—psycho-analytical methodology, scientific sexology of psycho-analysis, and Freudian philosophy of sexuality. We believe there is reason to extend this division to the whole of Freud's work, and to find therein a methodology, a psychology, and a philosophy.

His methodology is the essential part of Freud's work. His real claim to fame lies in having created a new process of investigation of the unconscious. It is strange indeed that so little emphasis has hitherto been laid on the absolutely primal role of methodology in psycho-analysis. It is, however, commonplace to assert that, in the sciences, the discovery of a new research technique is more important than any positive result whatever. This is true of mental processes as well as of material instruments. Where would astronomy be without the telescope and the spectroscope, histology without the microscope, surgery without X-rays? But the integral, and more recently the tensorial calculus have caused as great progress in astronomy as optical instruments. Scientific theories pass, but research techniques remain. No doubt they are susceptible of improvement, but they possess a final quality which evades the destructive grip of time. In science they stand for the eternal.

“In reality,” writes Freud, “psycho-analysis is a method of investigation, an impartial instrument, like, say, the infinitesimal calculus.”¹ This excellent simile deserves to be carried much further. The infinitesimal calculus was expounded by its originators by very rudimentary demonstrative methods; Newton was very uncritical in accepting evidence for the convergence of a series. It was the function of the mathematicians of the eighteenth century to give a satisfactory logical form to the discoveries of greater men than they. Psycho-analysis stands in much the same relation to the thinkers of the twentieth century; Freud’s presentation of it is insufficient from the logical point of view. But every psychologist or psychiatrist who applies Freud’s process of investigation to any really extensive material, may obtain practical corroboration of its validity. This being so, we need only work out the method of psycho-analytical research in accordance with the general rules of application of proof. We have attempted, during the course of this work, to contribute towards the building up of an exact psycho-analytical methodology.

While methodology is the very essence of psycho-analysis, yet it does not constitute the whole of it, even on the purely scientific plane. The formal element of psycho-analysis is supplemented by a material element. The latter comprises the sum total of the psychological results gained by the application of the method. These results are of very unequal value, and we have tried to discriminate among them, establishing the validity of those which stand close to reality, and eliminating those which derive from the arbitrary introduction of disputable or false postulates.

In Vol. I we divided the material dealt with by psycho-analytical psychology into three principal groups: (i) lower psychism (failed acts, dreams, and sexuality), (ii) morbid psychism (neuroses and psychoses), and (iii) higher psychism (art, morality and religion).

The psychology of the lower functions and psychopathology are the field in which psycho-analytical explanations score their greatest successes. We have already shown in sufficient detail that these explanations need completion or modification in various particulars, so that we need not return to this point here. What we are here concerned to demonstrate is that, however much elimination may be necessary, the scientific results which we owe to psycho-analysis are considerable. These results belong to psychology proper and not to philosophy. No doubt there may be an ill-defined boundary line here and there, but who would be so bold as to maintain that the connection of a dream or of a neurotic symptom to its substructure is not a work of science?

¹ F. I., p. 64.

It is much less easy to trace the line of demarcation between the psychology of the higher functions and philosophy. This will be realized when the reader compares the tendencies of the psychologists of the end of the nineteenth century with those of the moderns, especially in Germany. The heroic age of the foundation of psychological laboratories is far distant. The enthusiasm for purely positive methods has been replaced by a strong movement of reaction towards philosophical synthesis. Yet we believe that it is possible to distinguish psychology from philosophy, though to do so one must be a philosopher. The human mind is naturally inclined to meta-physical speculation—a process as unconscious as breathing. When it has systematically developed its capacities for ontological speculation, it simultaneously becomes apt to cease exercising the meta-physical capacity, in a reflex and voluntary manner. This we may describe as an unnatural operation. It is folly to suppose that it can be spontaneously achieved. The savant who possesses no philosophical training must inevitably trespass upon metaphysics. The metaphysician, on the contrary, precisely because he knows his territory, is able to leave it and travel round it from outside. Never to philosophize is humanly impossible. Man can only at certain moments reflexively refrain from philosophizing, on condition that at other moments he has reflexively philosophized.

Freud, who has no opinion of philosophy, has never studied it systematically. He has, however, attempted to apply the psycho-analytical method to difficult problems in connection with the higher psychism; he has tried, for example, to elucidate the origins of morality and of religion, both in the individual and in society. The result has been that he has often dabbled in philosophy without realizing it, even actually protesting that he was not doing so.

Philosophy must be reflexively cultivated. But whether one approaches it consciously or unconsciously, one may reach it from a number of different starting-points. Although this diversity of origin is not enough to compromise the strictly philosophical solutions one will accept, yet it will colour them to a certain extent. We may maintain that the physicist, the biologist, the psychologist, the mathematician and the logician, each has his own philosophy. Scattered throughout the works of Freud we may trace the outlines of an unconscious psychological philosophy.

To start from investigation of psychic activity in order to work out a total synthesis has been the standard method of some of the greatest names in the history of philosophy. We therefore think we may suitably pave the way for our estimate of the philosophical im-

portance of Freud's work by a few observations on the metaphysical systems with a psychological starting-point.

II. Two Conceptions of the Spirit

Philosophies of psychological origin have generally paid more attention to the cognitive than to the affective functions. This procedure has the great advantage of throwing the contrast between the various systems into bold relief, which makes their classification particularly easy. The solution to the problem of the relations between the senses and reason which any thinker accepts does, in fact, govern the whole framework of his metaphysical construction. We may distinguish four principal types of solution.

The first type is that of pure empiricism. The characteristic of this philosophy is the attempt to reduce the whole of human experience to sensory experience, and to deny the originality of reason. No doubt there has never existed any such thing as pure empiricism, free from all concessions to rationalism, although Hume's doctrine comes very near the limit. From the epistemological point of view, nominalism is the inescapable consequence of empiricism.

The second type comprises the systems which, although distinguishing reason from the senses, yet deny it the capacity of grasping reality in itself. This was Occam's position, in the fourteenth century. His doctrine, which has been strangely neglected by the historians of philosophy, strongly influenced both the revival of mechanics which preceded the Renaissance, and also Luther's thought. This means that a knowledge of it is indispensable to an understanding of the evolution of European culture. We may wonder whether Kant's influence has been wider than Occam's. The leader of the critical school also distinguishes reason from the senses, while denying that it has any hold upon the thing in itself. From the epistemological point of view, the doctrines of both Occam and Kant are variants of subjectivist conceptualism.

The third type consists of those doctrines which not only distinguish reason from the senses, but admit that the former possesses a validity based upon grasp of reality in itself. This apprehension of being is not regarded as by any means exhaustive, but however many limitations may be imposed upon it, it is formally recognized. Historically, this type of philosophy has Aristotelianism as its most distinguished representative. From the epistemological point of view, we are dealing with objectivist conceptualism.

In the fourth type are grouped the philosophies which tend to belittle sensory knowledge in favour of reason. Rationalism, indeed,

seems to have been no more successful than empiricism in establishing itself in an unmixed form. The systems of this type have great difficulty in avoiding the temptation of regarding human reason as the sum total of being. The Eleatic school, which we only know, unfortunately, from some brief fragments, was undoubtedly the most advanced example of this doctrine. The less radical Platonism has had far more historical influence. From the epistemological point of view, this is absolute realism.

For the end which we have in view, the foregoing classification may be simplified. Absolute rationalism, which maintains not only the distinction between reason and the senses, but also the complete independence of reason in relation to the senses, may be put out of court. The fact is that it cannot be reconciled with the conditioning of psychic activity by the organism. This conditioning is a philosophical fact. Pre-scientific human experience is enough to vouch for it; positive science defines its qualitative manifestations; natural philosophy judges its importance. It is enough to bar the way to the extremist pretensions of rationalism according to either Plato or Descartes.

Such forms of rationalism as do not allow reason the slightest capacity to grasp reality in itself, need not be distinguished from empiricism. The historians of philosophy, who are so fond of advanced classifications, must be so kind as not to take offence. From the point of view which is of interest to us, purely and simply to deny the existence of reason comes to practically the same as to refuse it all capacity to grasp reality as it really is.

We are therefore faced with two main directions of philosophical thought—empiricism and rationalism—it being clearly understood that the latter, as we envisage it, admits that reason depends upon reality for its content, and upon the organism for the conditions of its use. Empiricism and rationalism each possess their own conception of the spirit and of its principal manifestations—metaphysics, art, science, morality and religion. We shall try to schematize them, without concealing our own preferences.

The characteristic of the empiricist philosophy is the denial of the properly human specific quality of the manifestations of the spirit. So far as metaphysics is concerned, empiricism adopts an indirect attitude. It does not criticize the various metaphysical systems in themselves, nor pay any attention to their content, but simply declares that all metaphysical systems whatever are devoid of meaning and importance.

Towards art, empiricism is no less negative in its attitude. It cannot allow beauty any specific validity, for that would be to admit

the existence of an extra-sensory knowledge. *Æsthetic* emotion must therefore be reduced to pleasure resulting from the satisfaction of biological needs. Empiricism can only recognize a sensualist theory of art.

The validity of science is also called in question by empiricism. It is true that there are illogical empiricists who have tried to evade this question, and diplomatically to deny a point which they found damaging. But the great orthodox empiricists have generally had more courage, and have not hesitated to attack the validity even of mathematical knowledge. Berkeley published a polemical work against the fundamental concepts of the infinitesimal analysis. Stuart Mill criticized the ideas of unity and of equality upon which pure arithmetic, the most obvious part of mathematics, is based.

Morality has also been undermined by empirical criticism. The originality of the will is denied, and willing is reduced to a predominant sense-derived wish. It follows from this that the concept of free-will must be eliminated as meaningless. Such a system as Hume's, properly speaking, contains neither necessity nor contingency. Finally, the idea of rational norm, of finality immanent in reality and extracted by the spirit, is mercilessly excluded. Where morality is concerned, empiricism ends in hedonistic relativity.

It is quite clear that empiricism can find no place for religion. Its pure and simple rejection is an immediate consequence of its attitude towards metaphysics and morality.

The rationalist interpretations of the manifestations of the spirit are point by point opposed to the empiricist. Their characteristic is the assertion of the irreducible specific quality of human values. This is exhibited firstly in the direct attitude of rationalism towards metaphysics. It adheres to the principle that metaphysical research is legitimate. It discusses the solutions on their own merits, without refusing them a hearing, as empiricism does. It is most vitally important not to confuse the rationalist attitude with the content of the various rationalist philosophies.

Rationalism recognizes the originality of *æsthetic* emotion. It may propound various theories to explain it, but will never seek to reduce it to a cloak for the instincts.

It is perhaps where the problem of the validity of science is concerned that rationalism best exhibits its advantages. It finds it easy to justify the necessary and universal character of the truths of pure mathematics.

In morality, rationalism begins by re-establishing the distinction between the will and sense-derived wishes. The problem of free-will confronts it with a formidable difficulty. But firstly, it does invest

this problem with a meaning, whereas empiricism does not. Secondly, rationalism can find a place for free-will in so far as it is realist. For determining a rule of action, rationalism invokes the essential order of finality which binds beings together, and can thus distinguish the moral good from the useful and the pleasant.

Rationalism recognizes the legitimacy of religious inquiry. This is a consequence of its attitude towards metaphysics and morality. Here again, rationalism recommends the direct rather than the indirect attitude; the various solutions offered for the problem of religion must be examined in themselves.

The indirect attitude of empiricism may, moreover, be contrasted with the direct attitude of rationalism for the sum total of the manifestations of the spirit. Since it denies the specific quality of reason, empiricism can only reject spiritual values without discussing them intrinsically. It will be content simply to reduce them to combinations of sensory elements. Rationalism, on the contrary, boldly faces the investigation of spiritual values. This is due to the fact that it is much less a system of reason, than the conscious exercise of reason.

III. Psycho-analysis and Spiritual Values

When criticizing a philosophical system, one may either aim at proving it false, or simply establish the fact that the arguments upon which it is based are inconclusive. As we have already pointed out, Freud has never tried to take up a frankly philosophical position. He has merely used and illustrated the evolutionary empiricism current in biological and medical circles during his education. In these circumstances, we do not think it advisable to undertake to prove that Freud's philosophy is false. Empiricism has been refuted often enough by orthodox rationalist thinkers. We need not repeat or summarize their work. It seems to us, however, indispensable to pursue the critical examination of any novel considerations which Freud may have adduced in support of the empiricist theories. Has the tide of the battle between empiricism and rationalism, which has been raging since philosophy began, been modified by the intervention of psycho-analysis? That is the question to which we shall attempt to give an answer.

(i) Metaphysics

Nowhere in his work has Freud boldly confronted the problem of problems—metaphysics. If we wish to ascertain his views on the ability of human reason to comprehend being, we are reduced to interpreting passages which deal with other matters. Usually the

Freudian formulæ sound a very commonplace empiricist note. Yet here and there among Freud's writings there are passages which seem logically to imply a rationalist philosophy. We have drawn attention to the more interesting of these in Volume I. In dealing with the means of representation in dreams, Freud observes that dreams have no means of representing logical relations.¹ This observation is of primary importance. We might comment upon it philosophically somewhat as follows. Relation, regarded simply as relation, cannot be apprehended by the senses, and is only accessible to reason. We may see two equal lengths; we cannot see their equality. Now since relations are not amenable to sensory perception, they cannot be represented by the imagination, which adequately explains why dreams cannot represent them. The knowledge of relations is the exclusive privilege of reason.

The same is true of the knowledge of negation. We can use our vision to perceive black, but "not-white" is beyond the reach of our eyes. It is only revealed to the spirit. Freud has very clearly brought out the incapacity of the unconscious to grasp negation.

The attitude of dreams to the category of *antithesis* and *contradiction* is very striking. This category is simply ignored; the word "No" does not seem to exist for a dream. Dreams are particularly fond of reducing antitheses to uniformity, or representing them as one and the same thing. Dreams likewise take the liberty of representing any element whatever by its desired opposite, so that it is at first impossible to tell, in respect of any element which is capable of having an opposite, whether it is contained in the dream-thoughts in the negative or the positive sense.²

In an article on the opposite meanings of primitive words, published in 1910, Freud relied on the researches of the linguist Karl Abel in an attempt to explain this verbal bipolarity by a relativist conception of knowledge. "It is clear that everything in this planet is relative and has independent existence only in so far as it is distinguished in its relations to and from other things."³ This formula of Karl Abel, which Freud not only quotes, but adopts, confuses the conditions of knowledge with those of the thing known. This old sophism is to be found underlying the theses of the Greek sceptics, e.g. Sextus Empiricus. It is certain that we only form the concept of *unity* by contrasting it with that of *plurality*. From the point of view of the order of the formation of our concepts, we may therefore say quite correctly that unity is subsequent to plurality. From the point of view of the actual content of the concepts, however, it is quite obvious that unity is prior to plurality.

¹ I. D., p. 298.

² I. D., p. 304.

³ P. A. P., p. 187.

In 1925, Freud returned once more to the problem of negation. His article is very short, but very interesting. He begins by drawing out the fundamental distinction between endo-psychic reality and the individual's conscious judgment upon that reality. Given a patient who says: "You ask who this person in the dream can have been. It was *not* my mother."¹ From the logical point of view, this judgment may be either true or false. But from the psychological point of view, it is certain that the evocation of the mother by a dream-image is causally determined. In virtue of the principle of the relative constancy of unconscious psychic links, the chances are that, in spite of the patient's denial, the representation of his mother does play a part in the substructure of the dream under investigation. In this connection, let the reader refer to our analysis of the dream of the tawny badger. Freud has therefore grounds to maintain, at least in certain cases, that "negation is a way of taking account of what is repressed."² He next examines affirmative and negative judgments either of quality or of existence. He believes that affirmative and negative judgments of quality are related to the instinctual tendencies of ingestion and excretion. Affirmative and negative judgments of existence are also concerned with a question of "inside" and "outside."

What is not real, what is merely imagined or subjective, is only *internal*; while on the other hand what is real is also present *externally*.³

The study of judgment [he writes] affords us, perhaps for the first time, an insight into the deviation of an intellectual function from the interplay of the primary instinctual impulses. Judging has been systematically developed out of what was in the first instance introduction into the ego or expulsion from the ego carried out according to the pleasure-principle. Its polarity appears to correspond to the opposition between the two groups of instincts which we have assumed to exist. Affirmation, as being a substitute for union, belongs to Eros; while negation, the derivative of expulsion, belongs to the instinct of destruction.⁴

It is difficult to know what importance Freud himself ascribes to his derivation of affirmative and negative judgments from the life- and death-instincts. It is more than obvious that even the most strictly intellectual processes are sensorially and instinctually conditioned. But the real question is to ascertain whether this conditioning is partial or total. In other words, does judgment contain

¹ N., p. 367.

³ N., p. 369. *Italicized in the text.*

² N., p. 368.

⁴ N., p. 370.

anything irreducibly novel and original in relation to the affective processes which lead up to it? It seems to us impossible to dispute this.

In order to realize this more clearly, let us examine Freud's reasoning. We find that he has chosen as his starting-point a negative judgment bearing upon an endo-psychic process—moreover, a mistaken judgment. His theory is only valid for negative judgments which fulfil these two conditions. If we wish to extend it to negative judgments which do not bear upon endo-psychic realities, and are also true, we immediately perceive that it is inapplicable. Take for example, the judgments: "circles are not square," or "green is not red." It is impossible to maintain that in these judgments negation is a means of knowing the repressed. It is therefore illegitimate to maintain generally, as Freud does, that "to deny something in one's judgments is at bottom the same thing as to say: 'That is something that I would rather repress.'"¹

From the examination of relations and of negation we can deduce the essence of a metaphysic. Freud's observations concerning these two concepts show that his thought varies between empiricism and rationalism. He makes statements which lead directly to the thesis of the irreducibility of reason. Later he tries to show that the facts he has so carefully observed may bear an empiricist meaning. This hardened philosopher of sensualism has always felt, in spite of himself, a yearning to return to pure reason.

We may insist as much as we like [he confesses] that the human intellect is weak in comparison with human instincts, and be right in doing so. But nevertheless there is something peculiar about this weakness. The voice of the intellect is a soft one, but it does not rest until it has gained a hearing. Ultimately, after endlessly repeated rebuffs, it succeeds. This is one of the few points in which one may be optimistic about the future of mankind, but in itself it signifies not a little.²

(ii) *Art*

The incoherence of Freud's attitude towards metaphysics and the theory of knowledge extends to all that he has written on the various spiritual values.

So far as art is concerned, Freud wavers between the sexualist and play-theories, and the agnostic renunciation of any attempt at explanation. Let us begin by eliminating two points which are beyond all dispute. Firstly, Freud and his school are completely justified in emphasizing the influence of the unconscious in artistic

¹ N., p. 368.

² F. I., p. 93.

creation. There is no doubt that a critical manipulation of the psycho-analytical method can give us much information about the artist's complexes. In this role it is irreplaceable. Secondly, it is absolutely certain that the sexual instinct has a considerable influence upon art. This was known before psycho-analysis, but it has become still better known since. The cathartic function of art, which was already recognized by Aristotle, has grown in importance since Freud. In Volume I we pointed out the role of Pierre Loti's sexual complexes in the genesis of *Pêcheur d'Islande*. Let us venture a personal interpretation. It is well known that in this novel, the Breton girl marries the Iclander, and that a week after their wedding, he goes off deep-sea fishing, and never returns. Why did Loti choose this tragic ending? We could, of course, answer with generalities about the poetry of death, the human value of the theme of love and death, and so on. But concrete facts must in the last resort have concrete explanations. Let us not forget that Loti suffered for many years through not having married the girl he idealized in his novel. Are we to imagine that in his unconscious he cherished kindly thoughts about his successful rival? The fatal destiny of the fisherman is a literary catharsis of Loti's desires for vengeance. The man who married the woman he loved had to die.

Having recognized the importance of the unconscious and of sexuality in art, let us tackle the fundamental problem—how are we to regard the sublimation of sexuality in art? Here we may advance three hypotheses. (i) There is a strictly homogeneous relation between the original sexual term and the final artistic term. Now, according to the principle of sufficient reason, the greater cannot be derived from the less. Consequently, the specific quality of the value of art must be dismissed as an illusion. This solution has no chance of winning acceptance. The specific quality of art is an immediate datum of consciousness. Every theory which cannot find a place for it thereby admits its own falsehood. (ii) Art has an irreducible specific quality. Yet it is derived from sexuality, and from sexuality alone, by a truly creative evolutionary process. We must therefore reject the principle of sufficient reason. This solution is no more acceptable than its predecessor. It is absolutely impossible to sacrifice the principle of sufficient reason. (iii) Art has an independent qualitative value. Furthermore, the principle of sufficient reason requires that the perfection of the effect should not be superior to that of its cause. We must therefore conclude that sexuality is not the strict cause of art. However important the role of the sexual instinct may be in æsthetic emotion, it is accidental, not essential. We adopt this final solution.

Freud seems at some moments to recognize that the causal role of sexuality in art is only accidental. In 1910 he wrote:

We consider it probable that this very forcible impulse was already active in the earliest childhood of the person, and that its supreme sway was fixed by infantile impressions; and we further assume that originally it drew upon sexual motive powers for its reinforcement so that later it can take the place of a part of the sexual life. Such persons would then, e.g. investigate with that passionate devotion which another would give to his love, and he could investigate instead of loving. We would venture the conclusion of a sexual reinforcement not only in the impulse to investigate, but also in most other cases of special intensity of an impulse.¹

This passage seems clear. The fact that a superior tendency like art may incorporate sexual elements is due to its distinction from these elements. Art seems to possess its own specific quality, and only to derive an accidental reinforcement from sexuality.

In 1929, however, Freud wrote:

The science of æsthetics investigates the conditions in which things are regarded as beautiful; it can give no explanation of the origin or nature of beauty; as usual, its lack of results is concealed under a flood of resounding and meaningless words. Unfortunately, psycho-analysis, too, has less to say about beauty than about most things. Its derivation from the realms of sexual sensation is all that seems certain; the love of beauty is a perfect example of a feeling with an inhibited aim. "Beauty" and "attraction" are first of all the attributes of a sexual object. It is remarkable that the genitals themselves, the sight of which is always exciting, are hardly ever regarded as beautiful; the quality of beauty seems, on the other hand, to attach to certain secondary sexual characters.²

Here Freud certainly seems to assert that sexuality plays an essential causal part in the genesis of art.

Besides the sexualist interpretation, we find in Freud the elements of a play-theory of art, as we have shown in Volume I. In his study of wit, Freud distinguishes harmless from tendentious wit. He points out that from the theoretical point of view, harmless wit is more important, for the problem of the pleasure afforded by wit is there found in a pure state. Freud ascribes this pleasure to economy of psychic effort. Man experiences satisfaction in allowing his psychic apparatus to work without constraining it to conform to reality. This gratuitous exercise is play.

¹ L. V., p. 25.

² C. D., p. 39.

When we do not use our psychic apparatus [writes Freud] for the fulfilment of one of our indispensable gratifications, we let it work for pleasure, and we seek to derive pleasure from its own activity. I suspect that this is really the condition which underlies all æsthetic thinking, but I know too little about æsthetics to be willing to support this theory.¹

This passage, which was published in 1905, shows that Freud's orientation happened to be towards an æsthetic theory very far removed from sexualism, a theory which seeks the essential condition of the beautiful in the gratuitous exercise of the activity of the imagination.

We do not believe it possible to reconcile the two passages quoted with one another. In our view, Freud has not succeeded in working out an æsthetic synthesis which harmonizes the sexualist and the play-theories. He sometimes happens to adopt an agnostic attitude, and to accuse æsthetics of being "concealed under a flood of resounding and meaningless words."² These criticisms seem to us very unjust. Orthodox æsthetics contains more than meaningless words. It is much more interesting to observe that at times, instead of heaping æsthetics with ill-founded blame, Freud has very clearly perceived the limits of the psycho-analysis of art.

The layman may perhaps expect too much from analysis in this respect [he writes] for it must be admitted that it throws no light upon the two problems which probably interest him most. It can do nothing towards elucidating the nature of the artistic gift, nor can it explain the means by which the artist works—artistic technique.³

In the foreword which he wrote for Princess Marie Bonaparte's book on Edgar Poe, published in 1933, Freud thus expresses his views:

Such researches do not claim to explain the genius of creators, but they show what are the factors that have aroused that genius, and what sort of material destiny has imposed.⁴

This last statement seems to us perfectly correct, and we have no hesitation in adopting it. It satisfies the æstheticist claim of the specific character of their discipline. In his examination of the relations between psychology and art, Jung writes:

Art, like every other human activity, proceeds from psychic motives, and from this angle, it is a proper object for psychology.

¹ W., pp. 136-7. ² C. D., p. 39. ³ A. S., p. 102 (published in 1925).

⁴ Marie Bonaparte, *Edgar Poe*, vol. i, p. xi.

But this conclusion also involves a very obvious limitation in the application of the psychological view-point: *only that aspect of art which consists in the process of artistic form can be an object of psychology; whereas that which constitutes the essential nature of art must always lie outside its province. This other aspect, namely, the problem what is art in itself, can never be the object of a psychological, but only of an æsthetico-artistic method of approach.*¹

The distinction which Jung recalls is all too often ignored.

(iii) Science

Freud has adopted a definite attitude towards the problem of the validity of science. "We believe," he writes, "that it is possible for scientific work to discover something about the reality of the world."² Freud later discusses the objections usually advanced against science.

People reproach it for the small amount it has taught us and the incomparably greater amount it has left in the dark. But then they forget how young it is, how difficult its beginnings, and how infinitesimally small the space of time since the human intellect has been strong enough for the tasks it sets it.³

People complain of the unreliability of science, that she proclaims as a law to-day what the next generation will recognize to be an error and which it will replace by a new law of equally short currency. But that is unjust and partly untrue. The transformation of scientific ideas is a process of development and progress, not of revolution. A law that was at first held to be universally valid proves to be a special case of a more comprehensive law, or else its scope is limited by another law not discovered until later; a rough approximation to the truth is replaced by one more carefully adjusted, which in its turn awaits a further approach to perfection.⁴

Finally an attempt has been made to discredit radically scientific endeavour on the grounds that, bound as it is to the conditions of our own organization, it can yield nothing but subjective results, while the real nature of things outside us remains inaccessible to it. But this is to disregard several factors of decisive importance for the understanding of scientific work. Firstly, our organization, i.e. our mental apparatus, has been developed actually in the attempt to explore the outer world, and therefore it must have realized in its structure a certain measure of appropriateness; secondly, it itself is a constituent part of that world which we are to investigate, and readily admits of such investigation; thirdly, the task of science is fully circumscribed if we confine it to showing how the world must appear to us in consequence of the particular character of our own

¹ Jung, *Contributions to Analytical Psychology*, p. 225. Not italicized in the English translation.

² F. I., p. 95.

³ F. L., p. 96.

⁴ F. I., p. 96.

organization; fourthly, the ultimate findings of science, just because of the way in which they are attained, are conditioned not only by our organization but also by that which has affected this organization; and, finally, the problem of the nature of the world irrespective of our perceptive mental apparatus is an empty abstraction without practical interest.¹

The passages we have just quoted are a peremptory proof that Freud is a resolute supporter of the objective validity of science. But while professing that scientific knowledge has a grasp of reality, one may either maintain that the scientific interpretation of the universe is only partial, and leaves room for both metaphysics and religion, or claim that science excludes all metaphysics and religion, because it is itself *the* metaphysic and *the* religion. This latter attitude was fairly widespread towards the end of the nineteenth century, more especially perhaps in biological circles. It has often been called *scientism*. The Jena zoologist Haeckel was one of its most representative supporters. Freud has never cut himself loose from this conception, which was predominant during his youth. He regards religion as a delusion.² So far as metaphysics is concerned, we have seen that his empiricism did not allow him to recognize the legitimacy of a knowledge of the extra-sensory. Here is a brief and clinching quotation: "No, science is no illusion. But it would be an illusion to suppose that we could get anywhere else what it cannot give us."³ In Freud's view, there is nothing beyond scientific knowledge.

What must we think of Freud's conception of science? First of all, we must recognize that Freud's answers to criticisms which tend to depreciate science are not without a certain efficacy. So far as the objections claiming that scientific results are too few and too unstable are concerned, Freud's answers suffice to show that they lack grounds. But they do not in any sense enable us to conclude that science is capable of replacing metaphysics and religion. The discussion of the fundamental objection that the structure of our psychism does not enable us to attain reality in itself, is much weaker. Freud does not strike at the heart of the difficulty. To reach a solution, he would have had to analyse the concept of knowledge, and show that ultimately idealism was based on a wholly materialist conception of representation. It must be recognized, however, that an absolutely rigorous critique of idealism is rarely to be found even in the works of professed philosophers.

If Freud had never trespassed beyond the purely scientific field, we should have had no right to press him for a regular theory of science.

¹ F. I., pp. 97-8. ² Later we shall quote passages to illustrate this. (D.)

³ F. I., p. 98.

tific knowledge. But so soon as Freud conceives science as the sum total of knowledge, we have the right to ask him to prove his claim. We have seen that Freud's epistemological orientation is definitely empiricist. Now whereas empiricism utterly destroys the validity of religion, it is hardly more favourable to science. We recalled above the attitude of such a philosopher as Stuart Mill towards pure arithmetic. That attitude is a perfectly logical consequence of the premises of empiricism. A system which denies man the possession of a faculty superior to the senses is compelled to reject all knowledge of the essential and the universal. Freud is a dogmatic empiricist. This attitude, which is fairly widespread among scientists, is self-contradictory. Not only does the empiricist thesis not allow science so all-embracing a jurisdiction as would permit it to absorb metaphysics and religion, but it does not even license the claim that two and two must *always* and *everywhere* make four. Freud's "scientism" is in radical disagreement with his empiricism.

(iv) *Morality*

Morality is one of the spiritual values which Freud has most maltreated. First of all, we may search in vain for the will in the picture of the psychism which he has sketched for us. It may be objected that Freud is describing the morbid, not the healthy psychism and add that, in the foregoing pages, we have explicitly recognized that appeal to the will is not a psychotherapeutic means. Although Freud does not take the normal psychism as his principal object of investigation, he cannot help meeting it. Disease, both psychic and somatic, is defined with reference to health. The end of treatment is the return to normality, to the possibility of using the will. It may again be objected that since psycho-analytical treatment has as its aim the restoration of capacities, and leaves to other disciplines the task of regulating the use of these capacities, Freud need not have paid any attention to the will. This plea is invalid. From the very fact that the capacity of willing is re-established by psycho-analytical treatment, Freud was bound clearly to define his position on the recovery of the aptitude for willing, and so on the nature of the will itself, otherwise the result of his treatment remained indefinite. Moreover, he has applied psycho-analysis to the investigation of various forms of normal psychic activity, which constitutes a second reason for defining the place of the will in human action. Freud should therefore have preserved the role of the will in the economy of the human psychism. He has not done so, because his empiricist orientation led him of necessity to ignore the originality of the will.

Although the will, as is far too commonly supposed, does not

only express free acts, it must yet be recognized that the latter constitute its most remarkable privilege. Freud categorically denies the existence of liberty. Let us quote two passages at random.

Anyone thus breaking away from the determination of natural phenomena, at any single point [he writes] has thrown over the whole scientific outlook on the world (*Weltanschauung*).¹

And later in the same work he writes:

You have an illusion of a psychic freedom within you which you do not want to give up. I regret to say that on this point I find myself in sharpest opposition to your views.²

We must therefore inquire whether Freud has brought *novel* arguments to the support of the denial of free-will, and whether those arguments are valid.

Fundamentally, when the Freudian school rejects liberty, it is relying solely on the success of psycho-analysis, which has contrived to establish the existence and nature of a determination in many cases which had hitherto remained unexplained. We have sufficiently stressed the fact that psycho-analysis can claim very real successes. But wherein do these successes lead us to modify the philosophical position of the problem of free-will? What psycho-analysis has contrived to explain is such phenomena as failed acts, dreams and neurotic symptoms. But what sensible person has ever dreamt of denying that the facts in question were determined, and of dragging in free-will in this connection? We must not confuse the certainty of the existence of a law with the possibility of being able to formulate it: no one doubts the determinism of cancer, although no one is able to define in what it consists. It is astonishing that Freud imagines that his opponents could regard the lapsus as a free act.³ Let us repeat that the problem of free-will needs no discussion in a field in which it does not arise.

The question becomes more interesting when we apply the psycho-analytical method to the study of the normal psychism, and attempt to show that its functioning excludes liberty no less than that of the morbid psychism. Let us take a concrete case. Frink tells us that he was one day in some perplexity about his private affairs. He soon realized that he would not be able to surmount his difficulty without having recourse to a friend. The choice lay between three men. He was very intimate with all three, and knew beforehand that each one of them would do all he could to help him settle the matter. Instead of choosing one of the three, he made up his mind to approach a

¹ I. L., p. 21.

² I. L., p. 38.

³ I. L., pp. 37-8.

fourth individual, with whom he was but slightly acquainted, and whom he could scarcely call a friend. He had no logical reason for supposing that this man, whom we shall call X, was really in a position to give him suitable help. The outcome showed that Frink could not have made a better choice, but from the data available when he made up his mind, he should logically have recognized that he was running the risk of making the worst possible choice.

When Frink made his overtures, he was quite unaware that he was doing something very illogical and perhaps very dangerous. When his wife expressed her surprise at what he had done, he at once recognized how strangely he had behaved.

In seeking for the causes of so strange a decision, it came to his mind that the night before his visit to X, he had had a dream in which he experienced certain difficulties, representing his present fix, for the solution of which he invoked the aid of a certain T, who had been a member of the household when Frink was a boy. He at once understood why he had had recourse to X in the actual situation. He now noticed for the first time that there was a great physical resemblance between X and T, although they were of very different ages. This had led Frink unconsciously to identify X with T, and to feel towards the former the confidence which his childhood's experience had legitimately caused him to feel towards the latter.

When Frink had done anything stupid as a boy he used always to apply to T for help rather than to his father or grandfather. The fact was that he knew he could count on his forbearance, whereas his father or grandfather might easily have scolded him. The difficult situation in which he was placed when he consulted X was the result of certain mistakes he had made, mistakes which were not calculated to increase his self-esteem. The three friends to whom he should logically have applied were all incapable of having committed the kind of mistake into which Frink had fallen, so that Frink felt himself humiliated before them. These righteous people had something in common with his father and grandfather. Frink's whole behaviour, involving his rejection of his three friends and his choice of X, was merely a repetition of a fixed reaction of childhood. The fact that in X he found as devoted a friend as T was a remarkable stroke of luck.¹

Frink tells this story in order to explain the transference, and not to discredit free-will. But his general attitude is so strictly determinist² that I do not think I am in any way departing from his views in using his story as an illustration of how the Freudian school imagines it can show that a choice carried out by a healthy-minded

¹ Frink, M. F., pp. 117-19.

² Frink, M. F., pp. 19-25.

individual is not free, but results from influences arising from the unconscious, just like a failed act, a dream, or a neurotic symptom.

Let us grant without cavil that Frink has correctly interpreted the unconscious determinants of his attitude towards X. Do facts of this kind adduce anything at all *novel* against the belief in free-will? We believe not. Ever since the world has contained philosophers, they have been well aware, and have often repeated, that our past, our stock of previous experience, has—without any need to reappear in the field of consciousness—a great influence on our resolutions. All are agreed hereon, and yet some accept and others reject free-will. The novelty which psycho-analysis has to contribute is the possibility of ascertaining which elements of the past have been active in any given case. This is a splendid scientific result, but of no philosophical importance whatever.

That we may better judge the claims to deduce a proof of the determinist thesis from psycho-analytical findings, claims advanced by all too many Freudians, we may usefully state the question in more general terms: Can determinism be demonstrated *empirically*?

In the realm of physics, which is indisputably the most favourable ground for the application of the determinist idea, we are already forced to recognize that the latter cannot be proved experimentally. The reason for this is simple: the imperfection of our sense-organs does not enable us to take *absolutely* exact measurements. We may state, without fear of contradiction, that the human race will disappear from the face of the globe before having succeeded in establishing experimentally, with *absolute* precision, the equality of two lengths. We can increase the accuracy of our measurements by instruments, which is very interesting from the scientific point of view, but nothing to the purpose of philosophy. Experimental proof of the metaphysical thesis of determinism would require *perfect* measurements. Now there is not the least doubt that this postulate is incompatible with the very constitution of our bodies.

The foregoing argument is enough to settle the question, but it is not without interest to observe that modern physicists have considerably diluted the determinism of their Victorian predecessors. Raising the question on the strictly experimental ground, they have encountered instances in which the circumstances of observation of certain phenomena themselves modified those phenomena. Thus they arrived at a rather tardy discovery of the fact which philosophers knew all along—that it was impossible to *establish* determinism. Some of them have even spoken of a principle of indeterminacy. We ascribe no metaphysical value to the fluctuations of science. In order to define how much sound philosophy is yielded by the rather

confused assertions of modern physicists, one would have to embark on a rather delicate task of discrimination, which is outside our terms of reference. All that we have tried to make clear is that, if it has been given to our generation to see a non-determinist physics co-existing with a determinist psychology, the metaphysicians, from their lofty peak, will have been the witnesses of a very pretty turning of the tide.

Psychology is even less capable of establishing determinism than physics. To realize this, we need only state the problem of liberty correctly. Properly speaking, the essence of liberty does not consist in the power to act either in one way or in another, but in the power either to act or not. The question does not lie between two forms of being, but between being and not-being. It is indispensable to add that the special type of indeterminacy which characterizes liberty must be carefully distinguished from the state of potentiality in general. It is not *before* acting freely that one is most free, but *at the actual moment* of acting freely. Stuart Mill, among others, has been gravely mistaken on this point.

Hence it becomes inconceivable that one should ever attempt to establish the non-existence of liberty by experiment. All the evidence goes to show that it is impossible to deduce determinism from the infallibility of prevision. If even in the physical field, the impossibility of arriving at absolutely accurate measurements makes prevision (whatever its practical value) completely useless for the experimental proof of determinism, how much more will this be so in psychology! Here there are no measurements to apply, and prevision does not extend beyond a rather weak probability. In certain instances, psycho-analysis succeeds in relating the present to the past in a manner which is on the whole satisfactory. But when we are dealing with the converse—prevision of the future in terms of the present—we find how variable are the limits of psycho-analytical approximation. Freud himself has fully realized this. In his study of a case of homosexuality in a woman, he writes :

But at this point we become aware of a state of things which also confronts us in many other instances in which light has been thrown by psycho-analysis on a mental process. So long as we trace the development from its final stage backwards, the connection appears continuous, and we feel we have gained an insight which is completely satisfactory and even exhaustive. But if we proceed the reverse way, if we start from the premises inferred from the analysis and try to follow these up to the final result, then we no longer get the impression of an inevitable sequence of events which could not be otherwise determined. We notice at once that there might have

been another result, and that we might have been just as well able to understand and explain the latter. The synthesis is thus not so satisfactory as the analysis; in other words, from a knowledge of the premises we could not have foretold the nature of the result.

It is very easy to account for this disturbing state of affairs. Even supposing that we thoroughly know the ætiological factors that decide a given result, still we know them only qualitatively, and not in their relative strength. Some of them are so weak as to become suppressed by others, and therefore do not affect the final result. But we never know beforehand which of the determining factors will prove the weaker or the stronger. We only say at the end that those which succeeded must have been the stronger. Hence it is always possible by analysis to recognize the causation with certainty, whereas a prediction of it by synthesis is uncertain.¹

The passage we have just quoted is a model of scientific integrity. It utterly rejects the claim to prove determinism experimentally by the results of psycho-analysis. Yet the man who wrote the passage is fiercely determinist. We must therefore conclude that Freud implicitly confesses that he is a determinist for philosophical and not for scientific reasons. It is, in fact, certain that it is the province of philosophy—and of philosophy alone—to judge the limits of determinism, both in physics and in psychology. It belongs to philosophy to evolve the theories of pluralism, of chance, of contingency, and lastly of liberty. The denial of free-will entails certain epistemological premises. Empiricism obviously allows no meaning to the idea of necessity. We must go even further: the idea of *perfect* regularity implies the irreducible originality of reason. Even giving determinism the least metaphysical interpretation imaginable, and substituting constancy for necessity, yet—unless one makes no exact statement at all—one must grasp at a pure concept, a true terminal idea, which cannot be apprehended by the senses or represented by the imagination. Now empiricism cannot achieve this without self-destruction. Freud's empiricist orientation is incompatible with his uncompromising determinism.

Pursuing his invasion into the realm of ethics, Freud has undertaken to explain the origin of the moral feelings of obligation and of guilt, in the individual as well as in humanity in general. Let us first examine his psychogenesis of individual morality.

The reader will remember that in Freud's view the superego is the result of the introjection of the parental vetoes. He gives a highly empiricist explanation of the appearance of the moral sentiment by the progressive interiorization of the child's training. At

¹ H. W., pp. 226-7.

the most, he adds the restriction that the forces which inhibit sexuality might have become innate in humanity as we find it to-day.

If one undertakes to give a *complete* account of the individual psychogenesis of the moral sentiment by means of the schema we have just recalled, one will encounter a major objection. The theory of the superego only explains the *transmission* of a veto, not the veto itself. That is to say that the Freudian interpretation sets aside the essence of the problem. It postulates that in the moral field man *never* acts intelligently. He seems merely to receive and transmit a motiveless command. Where morality is concerned, man never seems to ask himself *why*. As Dr. Pichon rightly says:

Whereas psycho-analysis is capable of giving us an admirable explanation of the birth and content of feelings of guilt, it tells us nothing about the essence or substance of these feelings, that is to say, man's capacity to blame himself for this or that, to pass moral judgments upon himself, and the mode in which he sees things morally.¹

We must not conclude, from the fact that the theory of the superego tells us absolutely nothing about the actual basis of the problem of the origin of moral feeling in the individual, that the concept of the superego is therefore to be purely and simply rejected. It possesses, on the contrary, great psychopathological value.

We shall readily accept this if we take into account two important characteristics of the psychogenesis of moral feeling. Firstly, man has no innate ideas, and consequently, of course, no innate moral ideas. What is innate is his reason, his intellectual capacity to discern the essential relations of finality between beings. Freud has quite clearly seen that there is no innate moral content, a fact which is in itself easy to establish. But he has no grounds to deduce from this that one can "reject the suggestion of an original—as one might say, natural—capability of discriminating between good and evil."² This denial amounts to the destruction of reason. It is inconceivable that one can deny that man, *from the mere fact that he uses his intelligence*, is capable of perceiving that two different types of conduct have a different value. Let us take a simple example. It needs no more than a very rudimentary intelligence to realize that it is better not to blind oneself than to blind oneself. But this is enough to show that what the moralists call "the duty of self-preservation" has an absolutely general bearing for humanity. The further one departs from these

¹ Pichon, "Position du problème de l'adaptation réciproque entre la société et les psychismes exceptionnels," in *Revue de Psychanalyse*, vol. v, No. 1, pp. 151-2.

² C. D., p. 106.

simple and obvious instances, the more divergent conclusions does the diversity of intellects produce. Hence the multiplicity of moral systems. It is as absurd to conclude that morality does not exist, as it would be to maintain that physics does not exist, on the grounds that men have cherished the most contradictory ideas of the laws of matter. In all the orders of knowledge, the acquisition of truth is painful and fragmentary.

Secondly, we must not lose sight of the fact that judgment is strongly influenced by association, that reason with difficulty keeps afloat in the torrent of sensory images. Before the child can make an act of intellectual discernment, or grasp the reason for this or that attitude, he has undergone the training—the word is not too strong—of his parents or educators. He is furnished with mental habits before using his reason independently.

These two conditions—absence of innate moral ideas, and the influence upon the judgment of associative habits inculcated by education—determine that the part of the rational element in the moral convictions of the individual runs the continual risk of being crushed beneath the weight of the irrational element. In the abstract, it is quite certain that morality is of a rational order, but in the concrete, one is forced to recognize that reason does not play a very great part in human behaviour. Moralists of all ages have observed that men live rather according to their senses than to their reason, but they have tended to regard this general fact primarily as a culpable failure. This point of view has a certain value, and there can be no question of eliminating it completely. But even in the instances in which this explanation is true, it is still, psychologically speaking, superficial. Above all, the advances of psychopathology have increased the number of instances in which it is false. Though man may be more reasonable than the psychiatrists believe, he is less so than the philosophers think. His failures of conduct are very often to be explained by factors of pure determinism, excluding all idea of culpability. The practice of psycho-analysis gives one the impression of human illogicality. It is an impression which is too often lacking in jurists and moralists. We certainly do not dream of denying the specific and irreducible value of law and of morality, but we cannot refrain from regretting how completely most of their exponents neglect the study of the findings of psychopathology. The result of this procedure is that the judgments they deliver often exhibit a shockingly unreal quality. If there only existed moral consciousness, a practical function of reason, the ethical and juridical sciences would have a comparatively easy task—but alas! there is also the superego.

Freud has not been content with suggesting an explanation of the

origin of moral feeling in the individual; he has undertaken to account for the first appearance of this feeling in humanity. In Volume I we expounded his hypothesis of the murder of the father of the primitive horde. We must now examine the validity of this construction.

Malinowski has formulated a particularly serious criticism against it, which we may summarize thus: Freud endows the primitive horde—the Cyclopean family, as Malinowski calls it—with contradictory attributes. Let us develop this idea. The primitive horde, in virtue of Freud's hypothesis itself, is *not yet* human. To avoid falling into a flagrant *petitio principii*, therefore, we must picture to ourselves their behaviour on the model of that of anthropoid apes. Now we know that in the latter the sexual processes are governed purely by instinct. No doubt we have learnt, where instinct is concerned, to beware of the improper finalism of the old naturalists. We take care not to forget that, so far from being infallible, instinct often begins uncertainly, and makes many mistakes. It is none the less true that instinctive behaviour is much more rigid and much more stable than intellectual behaviour. The possibilities of endo-psychic conflicts in animals which do not come under man's influence are very slight. The experimental neuroses in Pavlov's dogs are the result of highly complicated laboratory devices.

If this be so, however [writes Malinowski], we have to challenge the premises of Freud's Cyclopean hypotheses. Why should the father have to expel the sons, if they naturally and instinctively are inclined to leave the family as soon as they have no more need of parental protection? Why should they lack females, if from other groups as well as their own, adult children of the other sex have also to come out? Why should the young males remain hanging around the parental horde, why should they hate the father and desire his death? As we know, they are glad to be free and they have no wish to return to the parental horde. Why should they finally even attempt or accomplish the cumbersome and unpleasant act of killing the old male, while by merely waiting for his retirement, they might gain a free access to the horde, should they so desire?

Each of these questions challenges one of the unwarranted assumptions implied in Freud's hypothesis. Freud in fact burdens his Cyclopean family with a number of tendencies, habits and mental attitudes which would constitute a lethal endowment for any animal species. It is clear that such a view is untenable on biological grounds. We cannot assume the existence in the state of nature of an anthropoid species in which the most important business of propagation is regulated by a system of instincts hostile to every interest of the species. It is easy to perceive that the primeval has

been equipped with all the bias, maladjustments, and ill-temperers of a middle-class European family, and then let loose in a pre-historic jungle to run riot in a most attractive, but fantastic, hypothesis.¹

This argument alone would suffice to compel us to reject the Freudian hypothesis of the primitive horde as incoherent. But other difficulties may be adduced against Freud's construction. Let us suppose that the murder of the father of the primitive horde actually took place; how could that murder explain the appearance in the sons' psychism of a *moral* feeling of guilt? We must not lose sight of the fact that by hypothesis we are dealing with an animal, and not with a human horde. How are we to think that the simple fact of having killed its father should be able to bring about, in an animal's psychism, the rising *ex nihilo* of an abstract idea of a norm, and the consciousness of having departed from that norm? The theory of the primitive horde no more explains the origin of moral feeling in mankind, than the theory of the superego explains its origin in the individual. In both instances, psycho-analysis tells us literally nothing about the genesis of the true substance of moral feeling.

Even if we granted that the attributes with which Freud endows the primitive horde are not incompatible, and that moral feeling might have been created by the father-murder, the Freudian hypothesis would still be open to two serious objections, one of psychological, the other of biological order.

It can hardly have escaped anyone [writes Freud] that we base everything upon the assumption of a psyche of the mass in which psychic processes occur as in the psychic life of the individual.²

He himself recognizes that conceptions of this kind raise great difficulties, but he thinks that

without the assumption of a mass psyche, or a continuity in the psychic life of mankind which permits us to disregard the interruptions of psychic acts through the deaths of individuals, social psychology could not exist at all.³

From the philosophical point of view, we regard the conception of a mass psyche as an untenable fiction. From the scientific point of view, we give Malinowski's opinion: "As a point of fact no competent anthropologist now makes any such assumption of 'mass psyche,' of the inheritance of acquired 'psychic dispositions,' or of any 'psychic continuity' transcending the limits of the individual soul."⁴ The same writer adds in a footnote:

¹ Malinowski, S. R., pp. 164-5.

³ T. T., p. 262.

² T. T., p. 261.

⁴ Malinowski, S. R., p. 157.

All the anthropological authorities, for instance, upon whom Freud bases his work, Lang, Crawley, Marett, never once in their analysis of custom, belief, and institution have employed such or a similar concept. Frazer, above all, rules this conception most conscientiously and methodically out of his work (personal communication). Durkheim, who verges upon this metaphysical fallacy, has been criticized on this point by most modern anthropologists. Leading sociologists such as Hobhouse, Westermarck, Dewey, and social anthropologists such as Lowie, Kroeber, Boas, have consistently avoided the introduction of "the collective sensorium." For a searching and destructive criticism of certain attempts at a sociological use of "mass psyche" compare M. Ginsberg, *The Psychology of Society*.¹

As for Freud's argument that the transmission of culture would be inexplicable without a mass psyche, Malinowski answers it as follows:

Anthropologists can clearly indicate what the medium is in which the experiences of each generation are deposited and stored up for successive generations. This medium is that body of material objects, traditions, and stereotyped mental processes which we call culture. It is super-individual, but not psychological. It is moulded by man, and moulds him in turn. It is the only medium in which man can express any creative impulse and thus add his share to the common stock of human values. It is the only reservoir from which the individual can draw when he wants to utilize the experiences of others for his personal benefit.²

Whereas the Freudian hypothesis is psychologically unacceptable because it postulates the existence of a mass psyche, it is biologically inadmissible because it is based upon the inheritance of acquired characteristics. The biologists who maintain the inheritance of acquired characteristics do so *only* because they need this concept to support transformism. When we raise the problem directly, when we seek for laboratory proofs of the inheritance of acquired characteristics, we realize that, in spite of all the efforts made in this direction for half a century past, no research worker has ever succeeded in furnishing the proof of the reality of the process invoked. Every year sees a crop of new "demonstrations"; the following year they are dead. In these circumstances, we are forced to recognize that the inheritance of acquired characteristics is no more than a convenient hypothesis, with no *positive* foundation. Cuénot's critique of the inheritance of acquired characteristics, published in various of his works, particularly *La genèse des espèces animales* and *L'adaptation*, has not as yet been refuted.

¹ Malinowski, S. R., p. 157 (note).

² Malinowski, S. R., pp. 157-8.

Our conclusion on the hypothesis of the original parricide must therefore be that it is based on anthropological romance.

Freud has from time to time pronounced completely adverse judgments upon the moral standards currently accepted by humanity in sexual matters. It is no part of our task to examine the foundations of sexual morality, but we must test the validity of Freud's criticisms.

Freud's views on sexual ethics are inspired by a very radical biologism. He seems consistently to postulate that the satisfaction of the instincts is the only satisfaction required by human nature, and that all the rest is artificial surplus. We have pointed out above, when dealing with the superego, how large a part is played by the irrational in the moral prohibitions accepted by the human individual, but we emphasized that a psychology which claimed to explain the essence of moral feeling without invoking the intelligence, is not a human psychology. Freud must be blamed for not taking into account the vital fact that instinct is not sufficient to govern human behaviour. Instinct in man is not in the same position as instinct in animals. Animal instinct is the only guide of behaviour; human instinct is made to function in a being gifted with intelligence. It follows necessarily from this circumstance that human instinct possesses qualities of inexactness and insufficiency which afford the intelligence its opportunity of action. When Freud maintains that all human ethical governance is artificial, we must reply that he is forgetting the place of the intelligence, and that though this or that form of culture in man is artificial, yet the general requirement of culture is part of man's nature. One might say, without being in the least paradoxical, that nothing is more natural to man than what Freud describes as artificial. We have again and again insisted upon the necessity of taking human pluralism into account. We shall not try to dispute that all too often philosophers have reached, from the higher level, an illusory unification, but it must in turn be granted that Freud has reached, from the lower level, a unification that is no less illusory. He almost comes not to regard anything as natural to man but the characteristics he shares with the other animals. One of his most distinguished followers, the American psycho-analyst Frink, whose works we have often had occasion to quote, has very clearly formulated the postulate underlying Freud's thought:

If one studies some simple organism, for instance the amœba, it is easily apparent that *all* its processes fall readily into one or other of the two groups, self-preservative and reproductive. If comparative studies are then made with other organisms higher in the phylogenetic scale, it will be found that there is nothing, not

excepting even the most complicated mental processes of civilized man, that is not represented in some simple and rudimentary way in the lower organisms, even to the *amœba*. Thus every item of human behaviour whether it be "explicit" (action) or "implicit" (thought or feeling) is revealed, either to direct observation or by tracing it back through phylogenetic history, as belonging either in the self-preservative or in the race-preservative group of reactions.¹

Evolutionary empiricism could have no clearer exposition than this.

Let us apply the foregoing observation to the problem of incest. Freud sometimes uses language which seems to mean that he believes the prohibition of incest to be something quite artificial, with no foundation whatever in the nature of man. Thus for example he writes that the veto on incestuous choice of object is "perhaps the most maiming wound ever inflicted throughout the ages on the erotic life of man."² Taking such a statement literally, one would be tempted to conclude that Freud recommends for man the sexual programme of animals. Freud himself would be the first to deny this conclusion. In the very work from which we have quoted the foregoing passage, he formally rejects the thesis of those who regard civilization as "to blame for a great part of our misery," and who imagine that "we should be much happier if we were to give it up and go back to primitive civilization."³ Freud's thought here involves a certain incoherence, due to the fact that he has enveloped the indisputable clinical facts concerning the *Œdipus* complex with a superfluous metaphysic. We are not among those who hesitate to assert the presence of an incestuous tendency when it is semeiologically certain, or inferred by an impartial methodology of investigation of the unconscious. But we demand one or the other of these conditions. Unless we are firm on this point, we run the risk of inventing myths. This is what has happened to Freud. Around the *Œdipus* theme he has woven a vast epic, the only merits of which are of an æsthetic order. When one regards the incestuous attraction of the child towards its parent of the opposite sex as anything other than an associative confusion, interesting from the clinical point of view, and always to be borne in mind when dealing with neurotic disorders, one ends by asserting the existence in human nature, not of a pluralism entailing permanent possibilities of accident, but of a real contradiction. Incest is not in opposition to man's animal nature, but it is in opposition to his human nature.

This is a point that Malinowski has very clearly grasped. After having insisted upon the plasticity of the instincts in man, due to the fact that they have to co-operate with the intelligence in the govern-

¹ Frink, M. F., p. 2.

² C. D., p. 74.

³ C. D., p. 44.

ance of human behaviour, and emphasized that since this is so, man can only live in a state of culture, Malinowski tackles the problem of incest. The family is the cradle of culture. Its organization cannot, like that of animals, be purely instinctive, but is necessarily cultural. Hence it follows that incest is seen to be irreconcilable with the very existence of culture.

Incest must be forbidden [writes Malinowski] because, if our analysis of the family and its role in the formation of culture be correct, incest is incompatible with the establishment of the first foundations of culture. In any type of civilization in which custom, morals and law would allow incest, the family could not continue to exist. At maturity we would witness the breaking up of the family, hence complete social chaos and an impossibility of continuing cultural tradition. Incest would mean the upsetting of age distinctions, the mixing up of generations, the disorganization of sentiments and a violent exchange of roles at a time when the family is the most important educational medium. No society could exist under such conditions. The alternative type of culture under which incest is excluded, is the only one consistent with the existence of social organization and culture.¹

Freud has clearly realized the incompatibility of incest and culture, but he must be blamed for not having thrown enough light on the fact that man can only live in a state of culture, and that consequently incest, as being incompatible with culture, is contrary to the nature of man regarded specifically as man. Freud often dabbles in what we might call biological mythology. Reacting strongly against the unrealism which is all too common among philosophers and moralists, who ignore man's animal nature, Freud ends by falling into unrealism in the opposite direction, ignoring man's human nature. It is particularly difficult to find a golden mean here. Thus Malinowski, whose anthropological thesis seems to us perfectly sound, criticizes the Œdipus complex far too much upon a priori grounds.² In reading this critique, we are far too conscious that he lacks practice in the psycho-analytical method, and that is something which cannot be replaced. In studying the psychology of the neuroses, dogmatism concerning the Œdipus situation, whether in a favourable or unfavourable sense, must be summarily dismissed. In psychopathology, we must always bear in mind Poincaré's magnificent phrase: "Experiment is the sole source of truth."³

Pseudo-biological unrealism is again to be observed in the manner in which Freud treats the rules restricting sexual relations other

¹ Malinowski, S. R., p. 251.

² Malinowski, S. R., pp. 245-6.

³ Poincaré, *Science and Hypothesis*, p. 140.

than the prohibition of incest. The language he uses constantly gives the impression that he regards them simply as excrescences. Yet the fact that neither in the present nor in the past has anthropology ever known of a human society in which liberty of sexual relationship was unrestricted, should give us pause. Malinowski has laid particular stress upon what he calls "the postulate of legitimacy"; no human society grants the same privileges to "legitimate" and "illegitimate children" alike.

In all human societies [writes Malinowski], however they might differ in the patterns of sexual morality, in the knowledge of embryology, and in their types of courtship—there is universally to be found what might be called the rule of legitimacy. By this I mean that in all human societies a girl is bidden to be married before she becomes pregnant. Pregnancy and children on the part of a young unmarried woman are invariably regarded as a disgrace. Such is the case in the very free communities of Melanesia described in this essay. Such is the case in all human societies concerning which we have any information. I know of no single instance in anthropological literature of a community where illegitimate children, that is children of unmarried girls, would enjoy the same social treatment and have the same social status as legitimate ones.¹

The *raison d'être* of the "postulate of legitimacy" is not difficult to grasp. "Culture—in the form of law, morals and custom—forces the male into the position in which he has to submit to the natural situation, that is, he has to keep guard over the pregnant woman."² The "postulate of legitimacy," like the prohibition of incest, is derived from man's human nature.

The fundamental argument advanced by Freud in his critique of current sexual morality is that the latter increases human suffering without compensation. Princess Marie Bonaparte's work entitled *De la destinée des instincts dans la civilisation* contains a remarkable exposition of Freud's views on this subject.³ We shall now point out why they seem to us unacceptable.

There are two fundamental points of view in morality—that of finality, and that of happiness. Philosophically, finality comes first, but no system can dispense with providing a solution to the problem of happiness. Kant himself, for all his claims, has had to take into account man's indefeasible aspirations towards happiness. From

¹ Malinowski, S. R., pp. 212–13.

² Malinowski, S. R., p. 212.

³ Marie Bonaparte, "Introduction à la théorie des instincts," eighth lecture in the series "De la destinée des instincts dans la civilisation," in *Revue de Psychanalyse*, vol. vii, No. 4, pp. 627–54.

time immemorial, moralists have been forced to recognize that virtue does not always lead the *individual* to happiness. This antimony has turned some towards pessimism, others towards an assertion of the immortality of the soul. But it is of primary importance to note that the difficulty they encountered was of a speculative order. It forced them to make a metaphysical choice, but left current morality intact.

Freud, on the contrary, raises the problem on the practical level, and especially in terms of sexuality: would it not be possible, by changing the culturally accepted moral laws, to find a solution to the sexual difficulty which would diminish human suffering?

We must recognize that Freud has conducted a most penetrating investigation of the various kinds of accident which prevent the human individual from reaching a happy culmination in his sexual functions. Many of his opponents have tried to pass over in silence, or to deny the facts upon which Freud has directed so pitiless a glare. These tactics may have been successful with people who possessed no special knowledge of sexual problems, but with psychiatrists or psychologists familiar with the data of sexology and psycho-analysis, the result of this procedure has been lamentable: it has seemed clear to scientists that the attitude of the moralists in question could only be explained by a great deal of ignorance, or a lack of intellectual honesty.

It is indisputable that cultural sexual morality gives rise to many accidents which cause serious suffering in the individuals affected. But when we examine the full array of Freud's arguments, we find that he has systematically confined his attention to stating one aspect of the problem. The rules of sexual morality are not, as Freud seems to think, arbitrary and motiveless prohibitions. They set out, on the contrary, to reach the same aim as that on which Freud thinks they should be opposed—the diminution of human suffering. Freud, who sees everything from the viewpoint of a clinician dealing with the psychoneuroses, finds nothing in culture but its waste products. It is therefore very easy—too easy—for him to draw up an eloquent indictment, the material for which is accurate, but arbitrarily chosen. The proof that it leads to accidents is not sufficient to condemn cultural sexual morality. There is no conceivable system of regulation of human behaviour which is not in the same case. One would have to adduce a *positive* solution, and show that it was a surer guarantee of human happiness. Freud does not adduce this positive solution.

We may therefore legitimately blame him for neglecting the essential point in the dispute. For whatever accidents cultural sexual morality may be held responsible, it is clear that we must preserve it if it provides surer means of attaining happiness *for the human race*

as a whole than the solutions which might conceivably be substituted for it. Now Freud has not even attempted to raise the question in its fullest aspects. He has never inquired whether the rules of sexual conduct, such severe stumbling-blocks in the lives of individual neurotics, are not, for society as a whole, necessary conditions of life and progress. The social point of view seems alien to Freud, but here it is primal. Let us observe that we are not here concerned with a "mass psyche," or anything of that kind. Where we blame Freud is for embarking on a purely destructive criticism of sexual ethics without suggesting anything definite to put in its place, and without examining the consequences of a modification of the accepted sexual norm governing relations between individuals as a whole.

The Freudians have usually imitated their leader. We find many criticisms bearing their signature, but when it comes to suggesting positive solutions, they remain prudently vague. Reich is one of the few who have not been content with a purely negative attitude. The solution he suggests is not, however, particularly novel, for it is to be found in Utopian works of all ages—community of goods and women.

A great realist such as Freud could not be taken in by such fancies. Therefore those who favoured Reich's views willingly let it be understood that Freud lacked courage, and shrank from the practical consequences of his ideas. This supposition does not at all fit in with Freud's character. He has never hesitated to challenge public opinion; his temperament impels him to seek trouble rather than to run away from it. It is not through timidity, we believe, that Freud has worked out no programme of sexual reform, but because he has grown progressively more aware that a modification of cultural sexual ethics would, *in the final balance*, show a loss. The diminution of suffering which it would bring about in certain instances would be more than offset by the damage that would be done to the formation of character in childhood by the greater instability of the family. Freud has no leanings towards being the prophet of a golden age to come. He is never more himself than when mercilessly criticizing those who promise man happiness, either in this life or the next.

It is simply the pleasure-principle [he writes] which draws up the programme of life's purpose. This principle dominates the operation of the mental apparatus from the very beginning; there can be no doubt about its efficiency, and yet its programme is in conflict with the whole world, with the macrocosm as much as with the microcosm. It simply cannot be put into execution, the whole constitution of things runs counter to it; one might say the intention that man should be "happy" is not included in the scheme of

“Creation”. What is called happiness in its narrowest sense comes from the satisfaction—most often instantaneous—of pent-up needs which have reached great intensity, and by its very nature can only be a transitory experience.¹

It is logical to apply this point of view to sexual satisfaction, as Jones has not hesitated to do in the most explicit manner. Studying the diminution of the sexual function brought about by culture, he writes:

There is reason to think that the state of affairs would not be so very dissimilar if the social restrictions on sexuality were greatly diminished, for this seems to be accompanied—as, for instance, during the decay of the civilizations of antiquity—by a serious loss in the value of love and life altogether. One cannot avoid the thought that there must be something in the nature of the sexual instinct itself that is not conducive to the attainment of full gratification—at all events in the presence of any form whatever of civilization.²

Freud himself would not disavow his follower. After having declared that sexual life in civilized beings “sometimes makes an impression of being a function in process of becoming atrophied, just as organs like our teeth and our hair seem to be,” he adds:

Sometimes one imagines one perceives that it is not only the oppression of culture, but something in the nature of the function itself, that denies us full satisfaction and urges us in other directions. This may be an error; it is hard to decide.³

The passage we have just quoted was published in 1929; the indictment of cultural sexual morality in 1908. We may say that Freud, after having appeared to take another direction, has returned to the point of view of orthodox philosophers. Moral laws, particularly those restricting sexual pleasure, are necessary to the rational disposition of social life. For humanity in general, they represent the indispensable means of attaining that very precarious and very relative happiness which is all that they can expect on this earth. It must be recognized that for those who fail to adapt themselves to these laws, they become the cause of severe suffering. Since the good of humanity in general cannot be sacrificed to that of deficient individuals, the question of a change of moral code does not arise. We shall add that the discordance between finality and happiness naturally leads the mind to examine the problem of religion.

¹ C. D., pp. 27–8.

² Jones, P. P., p. 563.

³ C. D., pp. 76–7.

(v) *Religion*

Freud pronounces an even less favourable judgment upon religion than upon morality. After having reviewed the various means of attaining happiness and avoiding suffering, he adds:

Another method operates more energetically and thoroughly; it regards reality as the source of all suffering, as the one and only enemy, with whom life is intolerable and with whom therefore all relations must be broken off if one is to be happy in any way at all. The hermit turns his back on the world; he will have nothing to do with it. But one can do more than that; one can try to re-create it, try to build up another instead, from which the most intolerable features are eliminated and replaced by others corresponding to one's own wishes. He who in his despair and defiance sets out on this path will not as a rule get very far; reality will be too strong for him. He becomes a madman and usually finds no one to help him in carrying through his delusion. It is said, however, that each one of us behaves in some respect like the paranoiac, substituting a wish-fulfilment for some aspect of the world which is unbearable to him, and carrying this delusion through into reality. When a large number of people make this attempt together and try to obtain assurance of happiness and protection from suffering by a delusional transformation of reality it acquires special significance. The religions of humanity, too, must be classified as mass-delusions of this kind. Needless to say, no one who shares a delusion recognizes it as such.¹

Some pages further on, Freud writes:

The goal towards which the pleasure-principle impels us—of becoming happy—is not attainable; yet we may not—nay, cannot—give up the effort to come nearer to realization of it by some means or other. Very different paths may be taken towards it: some pursue the positive aspect of the aim, attainment of pleasure; others the negative, avoidance of pain. By none of these ways can we achieve all that we desire. In that modified sense in which we have seen it to be attainable, happiness is a problem of the economics of the libido in each individual. There is no sovereign recipe in this matter which suits all; each one must find out for himself by which particular means he may achieve felicity. All kinds of different factors will operate to influence his choice.²

Having examined various solutions, Freud concludes:

Religion circumscribes these measures of choice and adaptation by urging upon everyone alike its single way of achieving happiness

¹ C. D., pp. 35-6.

² C. D., pp. 39-40.

and guarding against pain. Its method consists in denying the value of life and promulgating a view of the real world that is distorted like a delusion, and both of these imply a preliminary intimidating influence upon intelligence. At such a cost—by the forcible imposition of mental infantilism and inducing a mass-delusion—religion succeeds in saving many people from individual neuroses. But little more. There are, as we have said, many paths by which the happiness attainable for man can be reached, but none which is certain to take him to it. Nor can religion keep her promises either. When the faithful find themselves reduced in the end to speaking of “God’s inscrutable decree”, they thereby avow that all that is left to them in their sufferings is unconditional submission as a last-remaining consolation and source of happiness. And if a man is willing to come to this, he could probably have arrived there by a shorter road.¹

Freud has not been content with pronouncing a judgment upon the validity of religion by regarding it as a mass-delusion; he thinks that from the genetical point of view, it is derived from sexuality. This psychogenetical conception of religion is frequently to be met with among psychiatrists. They usually rely upon the following argument. When a delusion is manifested as concerned with a religious theme, deep investigation usually shows that it is likewise concerned with a sexual theme. Conversely, when the first appearance of a delusion is erotic, close examination usually reveals religious contents. Delusions exhibiting a dual theme, both erotic and mystical, are so much more frequent than those exhibiting a single theme, either erotic or mystical, that we cannot ascribe their preponderance to chance. Moreover, since it is generally recognized that disease is not properly speaking creative, that it merely amplifies pre-existing structures and makes them more clearly visible, is it not logical to suppose that religion and sexuality are connected by a link which normally passes unobserved?

Freud brings personal considerations to the support of this argument. He lays stress upon the compensatory role of religion towards human distress. To “exorcize the forces of nature, reconcile one to the cruelty of fate, particularly as shown in death, and make amends for the sufferings and privations that the communal life of culture has imposed on man”²—such are the functions which Freud ascribes to the religious attitude. Always careful to bring to the fore the infantile psychogenesis of adult states, he considers that there is a continuity between the distress of the child and that of the grown-up man.

¹ C. D., p. 42.

² F. I., p. 30.

Now when the child grows up and finds that he is destined to remain a child for ever, and that he can never do without protection against unknown and mighty powers, he invests these with the traits of the father-figure; he creates for himself the gods, of whom he is afraid, whom he seeks to propitiate, and to whom he nevertheless entrusts the task of protecting him. Thus the longing-for-the-father explanation is identical with the other, the need for protection against the consequences of human weakness; the child's defensive reaction to his helplessness gives the characteristic features to the adult's reaction to his own sense of helplessness, i.e., the formation of religion.¹

Since in Freud's view all emotional attachment is, in the last analysis, a sexual impulse with an inhibited aim,² the feelings of a child towards his father, and consequently those of an adult towards divinity, are regarded as derived from sexuality. Religion, according to Freud, proceeds from the Œdipus complex. The ontogenetical interpretation is also, as we have seen, reinforced by a phylogenetical.

Certain Freudians, notably Reik,³ have added some methodological suggestions to these primarily theoretical considerations. We have already dealt with these in Volume I. Here it must suffice for us to recall that Reik believes that the psycho-analytical method might serve to rid an individual of his religious beliefs, these being regarded as obsessions, and efforts made to bring up their hidden roots to the full light of consciousness.⁴

The attitude which Freud has adopted towards religion is as unsatisfactory as his position with regard to the problems of morality. In his view, religion is a mass delusion. The concept of "mass delusion," considered in itself and independently of any application to religion, is far from being indisputable. Unsociability is the most characteristic of all the traits of insane people. Their thought, always more or less self-centred, ceases to be a means of communion with other intelligences. No doubt there do exist induced delusions, but they are always restricted to a very small number of people—delusions shared by two or three individuals. Usually these are members of the same family. If we wish to apply the concept of delusion to a considerable group, we shall be compelled to grant psychic ætiology a much more important place than it can legitimately claim. We therefore regard the concept of "mass delusion" as of very doubtful value. It seems to be rather of polemical than of scientific importance.

¹ F. I., p. 42.

² A. S., p. 69.

³ Theodore Reik must not be confused with Wilhelm Reich. (D.)

⁴ Reik, "Dogme et idées obsessionnelles," in *Revue de Psychanalyse*, vol. i, No. 4, pp. 647-76.

Even supposing that the concept of "mass delusion" were capable of complete justification, Freud would still have to prove that religious belief is delusional. His writings may be sought in vain for that proof. We find certain peremptory assertions concerning the incompatibility of science and religion, but Freud has no argument to adduce on the very foundation of the problem. Nor is it obvious how, *whatever may be one's own personal solution of the religious problem*, one could show that religion is a delusion. A delusion is not only a false belief—otherwise all error would be delusional—but an irreducible belief which is obviously false. This may be realized merely by listening to the conversation of a persecution maniac. Once we cease to deal with immediate evidence and common-sense certainty, the application of the concept of delusion becomes a matter of some difficulty. Let us take the instance of paranoiac inventors, whose case will often gravely perplex the psychiatrist. The fact is that, except in certain cases which exhibit feeble-mindedness rather than true paranoia, the diagnosis is based solely upon the falsity of the invention in question. It often postulates an acquaintance with mathematics, physics, or chemistry which does not lie within the province of the average psychiatrist. How can one expect an asylum doctor to give judgment upon the delusional nature of a new type of aeroplane or submarine? He can only trust the opinion of specialist engineers. If he wishes to reach a personal conviction, he will be compelled to fall back upon critical examination of the patient's social attitude. That is to say that he will have transformed the problem which he has been set: from the investigation of a delusion concerned with invention, he will have passed to that of a delusion concerned with revendication. If one wished to proceed by any other method, one would end with the extravagant claim that psychiatry confers universal competence, and enables one to solve any and every question without special study. No one would be prepared to defend such a view *theoretically*, but we must recognize that frontier violations, *which are its practical equivalent*, are all too often committed. Improper claims are advanced to solve, by means of so-called psychiatric criteria, delicate problems of literary or artistic criticism, social reform, philosophy or religion. This last remark brings us back to Freud. We believe that his judgments upon the delusional character of religion are among the most regrettable examples of that "psychiatric totalitarianism" which we have just denounced. Psychiatry has everything to lose and nothing to gain through attitudes of this kind. The more accurate a science, the more severely restricted its field. When any intellectual discipline whatever claims to resolve problems of every kind, the logician must

tell himself that he is faced with a "pantology" rather than with a science. From the fact that the greatest thinkers of the human race have been unable to agree upon the religious problem, we must conclude that this problem lies essentially outside psychiatry, just as any literary or scientific problem. If the atheistic psychiatrist wants to remain faithful to the requirements of a strict methodology, he must regard religious belief, not as a delusion in the psychiatric meaning of the word, but as a conviction which he holds as false in virtue of his own personal philosophy.

But are there no really *positive* arguments which might compel the psychiatrist to adopt towards religion an attitude of systematic distrust very different from that which he adopts towards science, for example? Many of Freud's followers seem to have taken up this position, which is rather less emphatic than Freud's own. Without going so far as to say that religion is a delusion, they think they must keep up a reserve "towards religious feelings and beliefs, because they are so closely involved with neurosis."¹

It is absolutely certain that religion plays a more important part in delusional or neurotic themes than pure science. But this observation by no means entails the consequence that religion is in itself something pathological. The importance of religion in psychopathological themes is explained by the fact that not only does it bring human affectivity into play, but sets it in maximum vibration. Science, on the contrary, appeals only to the intelligence. Now it is clear that emotional crises strain the resistance of our psychic apparatus. It need not astonish us, therefore, that the latter should give way more often in connection with religion than in connection with science. From the extraordinary frequency of delusions with thematism of persecution—a frequency much greater than that of religious delusions—no one has ever tried to draw the conclusion that the instinct of self-preservation has anything pathological in its very nature. Why do certain people reason differently when it comes to religion?

Does the frequency of delusions of dual, erotic and mystical thematism, compel us to conclude that religion is genetically derived from sexuality? We do not think so. We shall find it quite easy to explain this dual thematism if we do not lose sight of the fact that psychological association is not identical either with essential physical causality, or with logical implication proper. This is quite clear in the case of association by contrast. Two contrary concepts, between which there exists, therefore, from the logical point of view, a

¹ Odier, "La théorie de Freud et son évolution," in *Revue de Psychanalyse*, vol. vi, No. 1, p. 30, (note 3).

relation of incompatibility, whereas, from the physical point of view, no causal relation proper can possibly exist (e.g. black and white), are nevertheless closely linked from the point of view of their appearance in the field of consciousness. Either of the two naturally evokes the other.

Let us apply these considerations to the relations between religion and sexuality. There exists in the psychism of normal believers, from the very fact that they ascribe a religious value to the laws restricting sexual pleasure, an association by contrast between religion and sexuality. If by any chance a conflict between these two tendencies reaches the limits of endurance of the psychic apparatus, a solution—illogical, no doubt, but none the less psychological—will tend to impose itself—coalescence of religion and sexuality. This process is already to be found in the symptoms of obsessionals, which satisfy both the impulse and the prohibition. Of course, if a delusion becomes established, the nexus between religion and sexuality will be still more complete. We observe that if it is accurate to say that delusions of dual, erotic and mystical thematism, merely amplify a structure already pre-existing in normal people, and make it easier to perceive, there is no necessity whatever to admit that this structure is a physical causality proper, and that religion is genetically derived from sexuality. The mechanism of association by contrast offers just as good an explanation of the facts.

Here is a personally observed case-history, in support of the foregoing interpretation. The patient, Célestine, now aged about twenty-five, entered a contemplative order a few years ago. After some months in the novitiate, her superiors, thinking her rather unbalanced, sent her back to her family. From that time there developed an extremely intense preoccupation with chastity—the first pathological manifestation. Then Célestine imagined it her vocation to make married couples live according to the spirit of the religious order she had had to leave, but to the ideals of which she had remained strongly attached; this was the second stage. The sexual impulse then became more clearly manifested in consciousness, and Célestine contemplated matrimony, but could not reconcile herself to losing her virginity—the third stage. At last the solution arose. Contemporary impiety surely gives us to suppose that the end of the world cannot be far distant. But Enoch and Elias are to come back to earth at that time. How will they come back? Surely by a process of natural birth. Happy the woman who becomes their mother! Célestine is to be that woman. She will be able to sacrifice her virginity if it is to give birth to prophets. This was the fourth stage; the delusion was now established.

Célestine's case is an indisputable example of delusion of dual thematism, erotic and mystical. The theory we suggested above explains it perfectly satisfactorily. To understand the psychogenesis of Célestine's delusion we have no need whatever to postulate that religion is genetically derived from sexuality. The (truly orthodox Freudian) schema of the return of the repressed through representations of repression is enough to give us the key.¹

We think that the dependence of the adult's religious attitude upon the child's Œdipus psycho-sexuality calls for the following criticisms. Firstly, we have already said that it was not as easy as the Freudians think to adduce strict proof of the existence of a genital or sexual Œdipus complex. The methodological rules which we have laid down compel us to cast the very great majority of published cases into the limbo of assertions without proof. We do not hesitate to assert the existence of Œdipus tendencies when we are in a position to prove it, but we refuse to subscribe to a metaphysic of incest. Secondly, the Freudian theory which claims to reduce all emotional attachments to sexual impulses with inhibited aim does not admit of proof by strictly positive methods. The facts allow a choice between various philosophical interpretations. Freud's categorical certainty is due to the fact that he regards the evolutionary empiricism generally professed by the biologists of his generation as self-evident. Thirdly, his purely affectivist conception of the origins of religion ignores the obvious fact that man is an animal that asks itself questions. No one denies that affectivity plays a great part in religion, but can one go so far as to declare that the origin of religion is *exclusively* affective? We think not. The reaction against orthodox intellectualism has ended by transgressing the limits of probability. However unreasonable man may be, it is none the less true that unreason postulates reason. The animal may have associations which orientate his behaviour towards disaster, leading him to death or to a serious accident, but strictly speaking, he is never mistaken, for to make a mistake, one must be capable of *judgment*, in the strict sense of the word. As Bergson so rightly says: "*Homo sapiens*, the only creature endowed with reason, is also the only creature to pin its existence to things unreasonable."² Hence we must conclude that the orthodox philosophers were right in asserting the existence, at the basis of religion, of a minimum of intellect.

To the aboriginal man [writes Spencer] and to every civilized

¹ Cf. G., pp. 144-5.

² Bergson, *The Two Sources of Morality and Religion*, trans. R. Ashley Andra, and Clouesley Brereton. Macmillan, 1935. p. 83.

child the problem of the Universe suggests itself. What is it? and whence comes it? are questions that press for a solution, when, from time to time, the imagination rises above daily trivialities.¹

That is the true root of religious speculation.

Let us forestall a possible misunderstanding. It is no part of our purpose here to discuss either the validity in respect of truth of any particular solution of the problem of religion, or even the general bearing of the concept of the divine. Our aim is much more limited. We are attempting to show that religious speculation and concern for his destiny is a perfectly normal and far from pathological event in man, and moreover, that this event is founded upon man's intellectual nature. The objection may perhaps be raised that this last assertion judges the solution of the question of truth in advance. This would only be so if we had asserted that religion proceeds from the *correct* exercise of reason, whereas we have simply postulated that it proceeds from the non-pathological exercise of reason, without attempting to discuss whether that exercise is logically correct. Our critique was aimed at a purely affectivist theory of the origins of religion. It must never be forgotten that while affectivity may be the principal source of error, it is not the only source. So when we have shown that a mental process is not simply affectively governed, we have not thereby established that it is logically valid. It would be absurd to ascribe the origin of a mathematical error, for example, to emotional impulses. Nor indeed can it be caused by an intellectual perception in the absolutely strict sense. One cannot apprehend the non-existent. If, therefore, mathematical error cannot be explained either by affectivity or by intellect in the strict sense, it can only be attributed to intellect in the wide sense. It must be the result of mental habits of more or less undynamic and automatic mechanism, encroaching upon strict intellect. We therefore think that psychologists of every belief, or unbelief, should agree in recognizing that man's religious unrest is a normal process of intellectual origin. To pursue this further is the function of logic and metaphysics, not psychology. Must we regard this or that conception of the divine, or the general assertion of the divine, as being truly valid, as proceeding from the *correct* exercise of reason? These are questions which the psychologist must refer to the metaphysician for investigation. In any case, the claim to suppress, in the name of psychiatry or of psycho-analysis, all *direct* discussion of religious problems, is inadmissible. Religious research enjoys its own autonomy.

The application of the concept of sublimation to the genesis of

¹ Herbert Spencer, *First Principles* (1863).

religion is open to criticisms similar to those which we passed above on the theory that art is a sublimation of sexuality. It cannot be disputed that the various psychic functions are interconnected, and that the intense activity of one of them entails a weakening of the others. As Ribot so justly observes, in a passage we have already had occasion to quote :

It is clear that the quantity of nervous influx is not expended in the same manner in both the mathematician engaged in speculation and the man engaged in satisfying a physical passion, and also that one form of expenditure hinders the other, since the capital sum of energy available cannot be used for two aims at once.¹

But we must carefully distinguish between "the quantity of nervous influx," to use Ribot's phrase, on the one hand, and the quality of the psychic operations which expend this "nervous influx" on the other. When the quality "mathematical work" succeeds the quality "physical pleasure" in the same individual, can we say that the latter is the proper cause of the former? Clearly not. The fact that a certain neutral and unqualified quantum of energy can only be used by a higher function if it is not being consumed by a lower, by no means proves that the higher psychism is a sublimation—in the true meaning of the word—of the lower. It is impossible to evade the application of this general principle to the theory which regards religion as a sublimation of sexuality. We must therefore dismiss that theory as unacceptable.

We believe that there are grounds for distinguishing three instances in the relations between religion and sexuality. The first instance is to be found in eroto-mystical delusions. It is characterized by the fact that obviously pathological religious manifestations are shown, by simple investigation at the conscious level, to have a sexual basis. Delusions of this kind are common. We have seen above that they were to be explained without reference to the postulate of the sexual origin of religion.

In the second instance, a pathological religious manifestation appears incomprehensible if we restrict our investigation to the conscious level, but application of the psycho-analytical method enables us to unearth the sexual root of the disorder. The case-history of one of Brill's patients, which we have already quoted in Volume I, affords us an example of this second instance. This obsessional patient used always to make a nervous movement with his arm. When questioned about it, he replied that the purpose of the movement was to prevent God from entering him, and that for months he had been obsessed

¹ Ribot, *Les maladies de la volonté*, p. 18.

with the idea that "God might get into him." Seeing that the idea against which his patient was struggling was apparently incomprehensible, Brill asked him to relax and to give his associations. The patient began by repeating that he was afraid God might get into him, and then stopped. When Brill urged him to go on, he said that a memory had come into his mind which had nothing to do with the question. Brill asked him nevertheless to reveal it. The patient then told him that six months earlier, someone in his office had told him to look out of the window, and he had seen two big dogs having sexual intercourse. A number of imaginations came flocking to his mind, especially "What would be one's feelings if one had sexual intercourse with a bitch?" Suppressing this fantasy, he said to himself: "I will not get into the dog, the dog may get into me." The similarity between the two phrases "GOD may get into me—The DOG may get into me" seemed to provide the obvious interpretation, and it was definitely confirmed by the fact that the patient had a trick of inverting words when writing in his diary.¹

The third instance is that of the normal religious attitude. This we shall consider as independent of sexuality. But then there arises the objection which Reik has formulated so insistently. The application of the psycho-analytical method to the study of the religious content would seem to enable us to show that the third instance does not exist. It could only be admitted by reactionary supporters of a superficial psychology, incapable of plumbing the depths of the unconscious.

This objection affords us an opportunity of carrying rather further than we have done hitherto the investigation of the conditions of validity of the psycho-analytical interpretation. When we were dealing with *psychic expression*, both in this volume and in its predecessor, we emphasized the contrast between the cognitive and the expressive functions of the psychism. It is because dreams have no object, because they are dereistic, that we must not endeavour to understand them logically, but to relate them causally to the realist and cognitive antecedent thoughts of which they are the psychic expression. Conversely, if we are investigating an authentic scientific discovery, its quality of realism and of truth, which implies that its content is *totally* determined by the object, does not permit us to regard that *content* as a psychic expression of the antecedent thoughts of the scientist. True knowledge can only be envisaged as psychic expression if its *content* is carefully dissociated from the simple fact of its *exercise*. Only the latter may be regarded as determined no longer by the object, but by the person's individual interests. A

¹ de Saussure, M. P., pp. 14-15.

mathematical thesis is a series of true propositions; its content is wholly governed by its object; it is derived from the cognitive function alone. But the author's decision to engage in mathematics must have been dependent upon this or that emotional stimulus, e.g. intellectual curiosity, ambition, etc. The existence of the mathematical thesis is therefore conditioned by the antecedent thoughts and wishes of the scientist; from this aspect, it is derived from the expressive function. We observe that the fruitful application of the psycho-analytical method to the investigation of the unconscious roots of a psychic product postulates that that product shall be dereistic.

When Reik sets out to explain religious belief by the action of an unconscious substratum discovered by the psycho-analytical method, he is compelled to postulate that religion is dereistic. That is to say, he assumes what he has got to prove. His whole construction is based upon a *petitio principii*. We are not faced with a strictly positive line of reasoning, but with an application of the psycho-analytical method which can only be justified by an implicit agnostic postulate. Speaking of the plain man's religion, Freud writes:

The ordinary man cannot imagine this Providence in any other form but that of a greatly exalted father, for only such a one could understand the needs of the sons of men, or be softened by their prayers and placated by the signs of their remorse. The whole thing is so patently infantile, so incongruous with reality, that to one whose attitude to humanity is friendly, it is painful to think that the great majority of mortals will never be able to rise above this view of life.¹

The point that interests us in Freud's passage is the negative metaphysical principle on which he hangs the whole validity of the application of the psycho-analytical interpretation to religion, viz. that belief in a divine providence is dereistic.

Reik rather cleverly conceals his *petitio principii*. Here is a passage from his work which we have already quoted in Volume I, but to which we must return here:

An obsessional idea [he writes] is irreducible so long as analysis does not succeed in relating it causally and temporally to the patient's experience. It is only when it has succeeded in this, when it has contrived to show the patient that his obsession has not, so to speak, fallen ready-made from heaven, that its enigmatical quality disappears and its latent significance is perceptible. It will then be possible to explain the mechanism of its origin, which was due to powerful psychic impulses. In spite of all the attempts at rationalization made by critics of religion, and in spite of all the efforts of free-

¹ C. D., p. 23.

thinkers to prove its absurdity, dogma will survive intact until we have understood its historical origin in the womb of the psychic evolution of humanity. The history of dogma and of the Church, as well as the science of comparative religions, will here partly replace analytical commentaries on the anamnesis of the individual. It is in this connection that psycho-analytical religious research will tend to make use of the raw material provided by these creeds to assist psychological commentary.¹

The essential deduction to be made from this passage is that, according to Reik, the *intrinsic* critique of religion is insufficient, and can only reach its aim if it is reinforced by the psycho-analytical method. The case will be like that of ordinary analytical treatment. What is this comparison worth? What makes psycho-analysis able to give valuable explanations of the various psychopathological symptoms of positive character, is the fact that the contents which it tackles are dereistic. It is important to notice that the preliminary certainty of this dereistic character possessed by psychiatry is one of the chief guarantees of the validity of its interpretation. Let us compare two equations, one true, $7 + 5 = 12$, and the other false, $7 + 5 = 13$. If we simply take the associative point of view, each of these combinations of figures may, in the same degree of lack of determination and of approximation, be related to the sum total of numerical images pre-existing in the mind of the individual. It is no more difficult to relate the three figures 7, 5, and 12, to this stock of memory than the three figures 7, 5, and 13. But if we envisage the strictly rational relations underlying the mathematical truth of the proposition $7 + 5 = 12$, and the mathematical falsity of the proposition $7 + 5 = 13$, the situation changes completely. From the logical point of view, we are compelled to say that the correct equation has its content governed by the object, and that therefore that content, considered in its specific nature, cannot be a psychic expression of the antecedent states of the individual. The incorrect equation, on the contrary, must necessarily be a psychic expression of those states, since it cannot be governed by the object. Its dereistic character will make its reducibility certain, even before it has been effected. Let us transfer this result to the problem raised by Reik. If the intrinsic critique of religion does not suffice to *demonstrate* its dereistic character, it is an illusion to suppose that the intervention of the psycho-analytical method will be able to close the discussion. For how are we to know that the psycho-analytical interpretation is valid, since to be sure of that validity, we must first be sure of the

¹ Reik, "Dogme et idées obsessionnelles," in *Revue de Psychanalyse*, vol. i, No. 4, pp. 657-8.

dereistic character of the product investigated? The means whereby Reik disguises his *petitio principii* only ends in turning it into a vicious circle. The dereistic character of religion has been established by the psycho-analytical method, but the applicability of the psycho-analytical method is in turn based on the dereistic character of religion.

An attempt may be made to save Reik's line of reasoning by presenting it differently. It may be said that the intrinsic critique makes it probable that religion is dereistic, and that the psycho-analytical method in turn makes it probable that it is the psychic expression of an unconscious psychosexual substratum, and that these two probabilities converge. The inquiry whether it is probable or improbable that religion is dereistic does not enter the scope of this work. That discussion is the concern of metaphysics. All that psychology can say, is that preoccupation with religion is neither intrinsically morbid, nor solely affective in origin. The convergence of probabilities only constitutes a valid argument if the probabilities concerned are *independent*.

Now we know that a previous knowledge of the dereistic character of the product, which is to be studied, is required for correctly bringing to bear the psycho-analytic method. In the present case, as the dereistic character of religion can be considered as probable only through intrinsic criticisms, independent probabilities are out of the question.

We therefore consider ourselves justified in entirely dismissing Reik's objection based on the application of the psycho-analytical method to the investigation of the religious content. Psycho-analysis cannot claim to decide any controversy in which the latter are involved. This, too, is merely the application of a general methodological law—questions of logical correctness or metaphysical truth cannot be decided by specifically psychological processes.

Having dismissed Reik's point of view, there is no further obstacle to our regarding the normal religious attitude as independent of sexuality. Like all the other spiritual values—metaphysics, art, science and morality—religion enjoys autonomy.

IV. Conclusion

Psycho-analytical investigation does not explain the philosophical aspect of philosophy, the artistic aspect of art, the scientific aspect of science, the moral aspect of morality, or the religious aspect of religion. The specific nature of the spiritual values eludes the instrument of investigation which Freud's genius has created. Psycho-

analysis leaves the fundamental problems of the human soul where it found them.

This negative result is easily explained if we have a clear idea of the psycho-analytical method. That method makes no attempt to investigate the specific nature of the higher, realist thought which envisages an object, but to relate it to inferior, dereistic, objectless thought. It is a study, not of knowledge, but of psychic expression.

From this point of view, there are grounds for comparing Freud and Kant, as a contemporary philosopher has so wisely suggested.¹

We find in Kant a radical dualism in the concept of knowledge. On the one hand, the very essence of his "Copernican revolution" consists in the assertion that thought is not governed by things, that its proper activity is of a constructive order—let us say with all the crudeness to which the psychopathologist is entitled that Kant conceives higher thought as dereistic. On the other hand, by his assertion of the existence of the thing in itself, Kant is compelled implicitly to admit the existence of a knowledge which actually attains that existence of the thing in itself, a knowledge of realist type. This dualism, which is fatal to the logical coherence of criticism, has been mercilessly exposed by Jacobi. It has governed the whole subsequent evolution of German idealism.

It is interesting to note that the leading concept of psychopathology, that of psychic expression, of non-cognitive but constructive mental activity, made its entry into the world under the disastrous auspices of a theory of higher thought.

Freud, who professes that he does not read philosophy, and has probably not read Kant, gives us to understand that the science of psychopathology is the legitimate heir of the liquidation of Kant's doctrines. The existence of a knowledge of realist type, i.e. higher thought, is undeniable. The interpretation of it which Kant has suggested is contradictory. But beside higher, realist thought, or rather beneath it, there lies its sub-product, lower, dereistic thought. Kant's conception of a non-cognitive, constructive thought, governed by its own laws, which are not those of its object, may legitimately be applied to the latter.

Yet it is far from true that Freud has been able to define the exact boundaries between higher realist and lower dereistic thought. His works contain innumerable instances in which the dereistic has trespassed upon the specific nature of values. This is regrettable, but we must in justice recognize that the first explorer of a new world can hardly chart its territories.

¹ A. Lalande, preface to Marguerite Combes' book, *Le rêve et la personnalité* pp. vii, viii.

If we wish to have an idea of the greatness of Freud's work, we must turn primarily to the analysis of dreams. There have been dreams ever since the existence of man on earth; they are a human, not a pathological phenomenon. It is only since Freud that we have been able to relate dreams which the dreamers themselves could not understand to their psychic substructure. Can scientific psychology afford any other examples of a psychic phenomenon so common, coeval with humanity itself, incomprehensible for such countless ages, and yet explained at last?

Freud's work is the most profound analysis that history has ever known of the less human elements in human nature.

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